



**Australian Government**

**Interim Inspector-General of Biosecurity**

---

**Effectiveness of biosecurity controls for importing  
stockfeed of plant origin**

**Interim Inspector-General of Biosecurity**

**Audit report**

No. 2014–15/03

© Commonwealth of Australia 2015

### Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

### Creative Commons licence

All material in this publication is licensed under a Creative Commons Attribution 3.0 Australia Licence, save for content supplied by third parties, logos and the Commonwealth Coat of Arms.



Creative Commons Attribution 3.0 Australia Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided you attribute the work. A summary of the licence terms is available from [creativecommons.org/licenses/by/3.0/au/deed.en](https://creativecommons.org/licenses/by/3.0/au/deed.en). The full licence terms are available from [creativecommons.org/licenses/by/3.0/au/legalcode](https://creativecommons.org/licenses/by/3.0/au/legalcode).

### Cataloguing data

Interim Inspector-General of Biosecurity 2015, *Effectiveness of biosecurity controls for importing stockfeed of plant origin*, Department of Agriculture, Canberra.

### Internet

*Effectiveness of biosecurity controls for importing stockfeed of plant origin* is available at [igb.gov.au/Pages/completed-audits-and-reviews.aspx](http://igb.gov.au/Pages/completed-audits-and-reviews.aspx).

Interim Inspector-General of Biosecurity

Department of Agriculture

Postal address GPO Box 858 Canberra ACT 2601

Switchboard +61 2 6272 3933

Email [inspgenbiosecurity@agriculture.gov.au](mailto:inspgenbiosecurity@agriculture.gov.au)

Web [igb.gov.au/Pages/default.aspx](http://igb.gov.au/Pages/default.aspx)

Inquiries about the licence and any use of this document should be sent to [copyright@agriculture.gov.au](mailto:copyright@agriculture.gov.au).

The Australian Government, represented by the Interim Inspector-General of Biosecurity, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Interim Inspector-General of Biosecurity, the Australian Government's employees and advisers disclaim all liability, including for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying upon information or data in this publication to the maximum extent permitted by law.

# Contents

Summary .....	1
Key findings .....	3
Conclusion .....	8
Recommendations .....	9
1 Background .....	11
2 Pre-border controls .....	15
3 Border controls .....	19
4 Observations and findings .....	31
Appendix A: Agency response .....	45
Appendix B: Approved stockfeed manufacturing facilities, 2015 .....	48
Appendix C: Analytical testing for the presence of animal-derived materials .....	50
Glossary .....	52
References .....	55

## Summary

### Background

- s1. The Australian Government's biosecurity system aims to minimise the risk of entry and establishment of exotic pests, weeds and diseases that could cause significant harm to the Australian economy and the environment.
- s2. The Australian Department of Agriculture has primary responsibility for managing Australia's biosecurity regime across the entire continuum (pre-border, border and post-border). Generally, the Australian Government has regulatory responsibility for pre-border and border activities, while state and territory governments are primarily responsible for post-border activities such as surveillance and responses to any incursions.
- s3. In recent years, the department's biosecurity management has placed increasing emphasis on using pre-border (offshore) measures to address risks. Consistent with international agreements, an important approach to mitigating quarantine risk offshore is to ensure that documentation, such as phytosanitary certificates accompanying imported consignments, certify that appropriate treatments have been carried out or that the goods are free from contamination, pests or diseases. At the border, the department conducts physical verification inspection of a representative sample of an imported consignment, against the accompanying documentation; this is to confirm that the imported material meets Australia's import requirements.
- s4. The Interim Inspector-General of Biosecurity (IIGB), as part of his annual work plan, examined the effectiveness of the department's biosecurity controls for importing stockfeed of plant origin into Australia.
- s5. Stockfeed of plant origin is a high-risk commodity because it is fed directly to animals, usually farmed livestock. It is imported either in bulk (in ships' holds) or in shipping containers (loose or bagged). In 2013 Australia's bulk imports amounted to 626 514 metric tonnes of stockfeed. Data on the amount of containerised imported stockfeed are not available. This is because the Department of Agriculture Import Management System (AIMS) database lacks specific fields for capturing this data and does not have a specific tariff code for stockfeed of plant origin.
- s6. An import permit is required for the import of stockfeed of plant origin, and imports must comply with conditions listed on the permit. In 2013, 40 import permits were active for containerised and bulk import of various types of stockfeed of plant origin.
- s7. The department implements measures to minimise biosecurity risks under the *Quarantine Act 1908* and subordinate legislation, including the Quarantine Proclamation 1998. The Quarantine Act governs importation of stockfeed of plant origin into Australia.
- s8. The department assesses biosecurity risks before an import is permitted. Generally, for importation of prohibited commodities into Australia, consideration of the level of biosecurity risk is based on the department's import risk analysis (IRA) or an assessment of individual products from a specific country. An import risk analysis or assessment

considers specific biosecurity risks and identifies appropriate risk management measures that must be applied to meet Australia's appropriate level of protection.

- s9. Biosecurity risks associated with imported stockfeed include contamination with prohibited/restricted seeds, soil, faeces, feathers or other animal related material and live insect pests. The department has identified particular animal diseases (or strains of diseases) of quarantine concern that are not present in Australia that could be introduced via stockfeed. These include:
- transmissible spongiform encephalopathies, such as bovine spongiform encephalopathy ('mad cow disease')
  - foot-and-mouth disease
  - swine vesicular disease
  - classical swine fever
  - peste des petits ruminants
  - virulent Newcastle disease
  - highly pathogenic avian influenza
  - infectious bursal disease.
- s10. The department manages biosecurity risks associated with entry of imported stockfeed through:
- science-based import risk analysis/assessment to underpin import policy
  - pre-border controls, such as desk and verification audits of manufacturing facilities in exporting countries
  - border controls such as inspection of consignments on arrival (including packaging) to ensure that they meet the department's requirements; and, when required, polymerase chain reaction (PCR) testing for the presence of ruminant DNA on arrival
  - collaborative networks/bilateral relationships
  - surveillance and intelligence gathering.

## **Purpose**

- s11. The purpose of this audit is to inform the Federal Minister for Agriculture about the effectiveness of the department's biosecurity controls in managing risks associated with importing stockfeed of plant origin into Australia.

## Key findings

### Biosecurity controls

- s12. The department performs comprehensive desk audits of overseas manufacturing facilities in approved countries and may undertake verification site audits of these facilities to confirm findings from desk audits. Across the biosecurity continuum, pre-border assessment of manufacturing facilities is one of several measures used to provide assurance that Australia's appropriate level of protection will be met.
- s13. When containers are unloaded onto the wharf, they are inspected (externally) to ensure freedom from foreign pests and diseases. Biosecurity officers then permit the movement of consignments to an approved quarantine approved premises for 'landed inspection'. Based on earlier desk and verification audit assessments of the manufacturing facility, samples may be drawn (and pooled) from an imported consignment during landed inspection; these samples will be used to test for the presence of ruminant DNA. Testing is also required if packaging is damaged, unclean or deficient.
- s14. The biosecurity risks associated with stockfeed are managed by three divisions of the department. Based on evidence obtained from the desk audit and fieldwork, the IIGB is satisfied that in general the risks associated with imported stockfeed are satisfactorily managed by the department. The IIGB did not undertake any in-country audits because of cost constraints and because it would not have added much additional value. However, through the desk audit of records and review of information provided for several overseas establishments, the IIGB is satisfied that the department is effectively applying pre-border controls to reduce the risks and that these controls are consistent with Australia's appropriate level of protection for this commodity.

### Import requirements

- s15. An import permit is required to import stockfeed of plant origin into Australia. The department publishes import conditions for stockfeed on its Import Conditions Database (ICON). Import conditions stipulate the requirements that must be met before an import permit is granted. When assessing applications to import stockfeed, the department undertakes a first-tier assessment to ascertain whether the commodity meets the basic requirement criteria. If the commodity meets those requirements, detailed information is requested from the manufacturer in order to undertake a desk audit. On completion of a successful desk audit, the manufacturing facility and export pathway may be subject to a verification audit by department officers, who undertake a systematic assessment of the facility and export pathway. In addition, a suite of control measures are applied along the pathway to mitigate identified biosecurity risks.
- s16. The department expects that the regulatory systems and procedures of an exporting country should help ensure that stockfeed that requires phytosanitary certification and is exported to Australia complies with our import requirements. Document verification and physical inspection of stockfeed consignments on arrival are intended to confirm that consignments comply with Australia's import requirements. In determining import requirements, animal and plant disease risks must be thoroughly considered.

## Import risk analysis

- s17. Importation of plant-based stockfeed into Australia has a long history and controls to minimise biosecurity risks associated with imports have been in place for several decades. The department published an import risk analysis (IRA) for importation of heat-processed stockfeed of plant origin in 1999 (AQIS 1999). The IRA primarily identified animal diseases and pest risks and management options, and was used to develop conditions for importing a limited range of heat-processed stockfeeds of plant origin. In 2011 this IRA was subsumed into *Guidelines on the policy for imported stockfeed of plant origin* (DAFF 2011a). All permit applications to import plant-based stockfeed are assessed against these guidelines.
- s18. In recognition of stockfeed being a high-risk commodity and increases in imports since 1999 and in the number of countries from which stockfeed products are sourced, the IIGB recommends that it would be appropriate for the department to proactively review and update the IRA and/or policies for import of stockfeed into Australia.

## Communication of biosecurity risks and information sharing

- s19. The department actively consults with stakeholders to promote understanding and awareness of biosecurity risks in the plant-based stockfeed trade. This includes:
- undertaking policy reviews and import risk analyses and issuing ICON alert notices, when required
  - updating import requirements in ICON as the biosecurity risk situations change in source countries (as a result of, for example, ongoing surveillance and intelligence activities, the World Organisation for Animal Health (OIE) notifications and International Biosecurity Intelligence System alerts)
  - communicating on a range of issues with overseas government counterparts and importers of stockfeed.
- s20. Across the regions, imports of plant-based stockfeed are jointly managed by the department's Biosecurity Animal, Biosecurity Plant and Compliance divisions. However, in discussions with relevant divisions of the department, the IIGB noted that communication between relevant divisions could be improved to ensure effective information sharing. For example, clearer communication between divisions could resolve issues associated with inconsistent recording of imported consignment details; these details are essential for effective implementation of the department's risk-return model. Similarly, sharing information about non-compliance incidents and options (advice) provided to importers for treating contaminated consignments could help policy areas strengthen the mitigation of biosecurity risks. The department should consider, as a priority, developing and implementing a communications strategy involving all relevant areas of the department.
- s21. During the preparation of this report, the IIGB noted that the department's Biosecurity Plant and Biosecurity Animal divisions have formed a task group to facilitate clearer communication and information sharing between the two divisions. This will help ensure both animal and plant biosecurity risks continue to be managed consistent with Australia's appropriate level of protection. The IIGB strongly supports this initiative.

## **Verification audits of overseas stockfeed manufacturing establishments**

- s22. Imported stockfeed is fed directly to animals. It therefore poses higher biosecurity risks because of the possible presence and direct transmission of animal pathogens. The department generally approves individual manufacturing establishments before an import permit is granted. The department undertakes verification audits of overseas manufacturing establishments to further assess any pre-border biosecurity risks identified during the desk audit. Such audits are usually undertaken by departmental Biosecurity Plant Division staff who have formal auditing qualifications. On a few occasions, staff from the department's Biosecurity Animal Division have participated (primarily as observers) in verification audits alongside auditors from Biosecurity Plant Division.
- s23. The IIGB recommends that the Biosecurity Plant and Biosecurity Animal divisions jointly undertake more future verification audits of overseas manufacturing establishments. This would help ensure that both animal and plant biosecurity risks are adequately assessed and addressed in an appropriate manner offshore. However, this could place additional pressure on limited staff resources. It was noted that staff in the Biosecurity Animal Division also have appropriate auditing qualifications and could lead auditing teams on verification audits at overseas manufacturing establishments.

## **Testing for presence of animal-derived materials**

- s24. Global spread of transmissible spongiform encephalopathies, particularly bovine spongiform encephalopathy (BSE), remains a significant risk. Testing for ruminant-derived material, including meat and bone meal in stockfeed, is central to Australia's risk management strategy, ensuring that Australia remains in the OIE's lowest risk category for BSE.
- s25. Imported stockfeed consignments are subject to PCR testing if, during the desk and/or verification audits, the department suspects that offshore measures would likely not reduce the BSE risks to acceptable levels. Generally, this is an additional control for high-risk stockfeed imports from countries (irrespective of their animal health status with the OIE) and is intended to address the BSE risk. The purpose of PCR testing is to confirm the presence or absence of mammalian-derived material in imported consignments; it is not useful where DNA from other animals may be present. PCR testing is also undertaken when packaging is found to be old or damaged. Such consignments must remain at a quarantine approved premises (QAP) until the department has received the test results.
- s26. The large volumes of imports (one bulk consignment could contain more than 50 000 tonnes of stockfeed) can make the cost of treating contaminated consignments impracticable. The other options for contaminated consignments are either re-export or destruction. The department's choice of treatment should ensure that biosecurity risks associated with both animal and plant pathogens have been satisfactorily addressed. The IIGB noted that the department does not have a policy (or guidelines) that provides treatment options for contaminated consignments. However, only a small number of imported consignments have tested positive in the past five years. The IIGB recommends that the Biosecurity Plant and Biosecurity Animal divisions jointly develop a policy (or guidelines) that provide treatment options for contaminated consignments. Contamination issues could vary considerably, making drafting and applying a uniform



policy complex and challenging. However, to satisfactorily address cross-contamination issues, a uniform policy or guidelines for treatment would be desirable.

### **Information technology**

s27. In managing entry through to clearance of imported stockfeed consignments, the department relies on integrated and networked information technology systems across all regions. Entry management and inspection staff use the Department of Agriculture Import Management System database (AIMS) on a daily basis to record real-time processes, including entry management, point-to-point movement of imported goods and inspection findings. AIMS interfaces with the Australian Customs and Border Protection Service Integrated Cargo System (ICS). The IIGB noted that the department's trials of mobile devices (tablets) appeared to offer increased productivity, as staff were able to make decisions on the spot about any particular consignment, enabling them to move on to the next job without having to return to the office. The department has started rolling out mobile devices for all biosecurity officers at the border. The IIGB commends the department for this initiative as it should enable greater efficiency and productivity gains in the management of biosecurity risks, while also providing quicker, nationally-consistent service to clients.

### **Centralised processing of entries for bulk imports**

- s28. Currently, Compliance Assessment and Management Services (CAMS) staff in regions assess documents accompanying containerised stockfeed consignments and prepare inspection schedules for inspection staff. In contrast, for bulk imports at all ports, Bulk Commodities National Coordination Centre (Bulk Commodities NCC) staff at Newcastle assess documents submitted electronically by the importer/broker. The Bulk Commodities NCC staff then create a bulk vessel inspection schedule, which they email to CAMS staff in all regions. CAMS staff (at the respective ports of entry) then enter the relevant information in AIMS and also issue instructions to staff undertaking inspection of a bulk consignment.
- s29. The IIGB recommends that all bulk stockfeed import entries be processed by experienced, trained staff at the Bulk Commodities NCC, Newcastle. This would also remove the need for importers or their agents to present or submit accompanying documentation at two different locations—a duplication that has been of concern to them. The IIGB anticipates this arrangement would ensure more efficient and consistent data capture at the border and improved service delivery to the department's clients across the regions.

### **Job card and training package**

s30. All staff who inspect imported consignments of stockfeed should be fully competent in understanding and recognising the biosecurity risks and ensuring these are addressed appropriately before a consignment is released from quarantine control. The IIGB noted that for all bulk imports in ships' holds, a new or inexperienced officer receives on-the-job training alongside an experienced biosecurity officer. After several inspections as an assistant biosecurity officer, the officer is required to demonstrate an acceptable level of competence before independently undertaking onboard inspection activities.

- s31. The IIGB recommends that this training package clearly sets out a step-by-step procedure for recording, in AIMS, details such as import permit number, consignment description, and inspection and testing outcomes for each imported bulk and bagged stockfeed consignment imported into Australia. This would ensure consistent recording of appropriate details across the regions, allowing inspectors to analyse data from AIMS, as required. Further, these data should be available to relevant areas in the department for analysis of policy and regulation effectiveness in addressing biosecurity risks. The job card and training package being developed by the department's Compliance Division should be finalised and distributed as a priority.

### **Work instructions**

- s32. The department has developed a work instruction to help officers with verification inspection and clearance of imported stockfeed consignments. The IIGB noted that this work instruction was last revised in early 2006 (AQIS 2006). Due to recent changes in sampling and inspection requirements (DAFF 2013b), this document needs further revision to bring it up to date with current requirements.

## Conclusion

- s33. Numbers of source countries, volumes and types of imported stockfeed of plant origin have increased in recent years. Contaminated imported stockfeed of plant origin could introduce exotic animal and plant pathogens into Australia due to the direct consumption of the product by susceptible animals (or contamination of the environment), especially in rural areas. The foot-and-mouth disease (FMD) outbreak in Japan in 2000 may have been due to imported stockfeed from China. Recent outbreaks of FMD in Korea and Japan in 2011 highlight the need for the department to remain vigilant. The department should proactively review and update policies for import of stockfeed into Australia.
- s34. The importation of stockfeed of plant origin is assessed case-by-case, and any approval is for a specific manufacturing facility and import pathway. Across the biosecurity continuum, the department aims to address most identified biosecurity risks offshore. Generally, one common measure to mitigate biosecurity risks of imported plant-based stockfeed is by heat treatment of raw materials. Therefore, the minimum required core temperature should be achieved during processing, especially if the stockfeed is from countries with a higher or undetermined animal pathogen risk or is sourced from small household farms. This is considered in conjunction with the department's subsequent verification of import pathways through desk and verification site audits to ensure compliance with department policies. Once each consignment is cleared at the border through document assessment and physical inspection, the product is released from quarantine.
- s35. During an in-country site audit, the whole manufacturing process is examined, from receipt of raw materials to loading for export of the final product. The inspection is to verify the information assessed in the desk audit and to confirm that no animal-derived materials, whole seeds or other materials of biosecurity concern can contaminate the final product, either through the manufacturing process or elsewhere along the export pathway. If resources can be provided, it would be beneficial to include a trained auditor from the department's Biosecurity Animal Division in more of these in-country verification audits.
- s36. The IIGB concludes that the department's management of biosecurity risks associated with imported stockfeed is generally satisfactory. This conclusion is based on an examination of the department's relevant policies and procedures, in-country inspections, border inspection procedures and staff training. The recommendations in this report are intended to further improve the quality of management and reduce the level of residual risk.

## Recommendations

The full department response to the recommendations is at Appendix A.

### Recommendation 1

paragraph 4.7	<p>The department should review and update its import risk analysis and/or policies for importing plant-based stockfeed into Australia.</p> <p><b>Department's response:</b> Agree</p>
---------------	--

### Recommendation 2

paragraph 4.16	<p>The department's Biosecurity Plant and Biosecurity Animal divisions should jointly undertake desk and verification audits of overseas stockfeed manufacturing establishments to facilitate more effective pre-border compliance and reduce the risk of both plant and animal disease incursions.</p> <p><b>Department's response:</b> Agree</p>
----------------	--

### Recommendation 3

paragraph 4.22	<p>The department should consider implementing a programme of strategically targeted audits of overseas manufacturing facilities and export pathways for plant-based stockfeed. These audits should focus attention and resources on identified areas of higher risk and ensure that compliance is further promoted.</p> <p><b>Department's response:</b> Agree</p>
----------------	---

### Recommendation 4

paragraph 4.40	<p>The department should (consistently across all ports) routinely record the import permit number, consignment description and inspection and testing outcomes (where applicable) of all bulk and bagged stockfeed consignments imported into Australia. These data should be available to relevant areas in the department to establish whether policy and regulation are effectively addressing biosecurity risks.</p> <p><b>Department's response:</b> Agree</p>
----------------	--

**Recommendation 5**

paragraph 4.43	<p>The department should centrally process all entries for ‘bulk in ships’ holds’ stockfeed imports at the Bulk Commodities National Coordination Centre, Newcastle.</p> <p><b>Department’s response:</b> Agree</p>
----------------	---

**Recommendation 6**

paragraph 4.54	<p>The department should maintain ongoing testing for animal biosecurity risk material at an appropriate level and record results in a central register that is accessible to the department’s policy and operational staff.</p> <p><b>Department’s response:</b> Agree</p>
----------------	---

**Recommendation 7**

paragraph 4.59	<p>The department should finalise the job card and a staff training package for inspectors of imported stockfeed within the next six months. The training package should include a step-by-step procedure for recording (in the Department of Agriculture Import Management System, AIMS) details of each stockfeed consignment imported into Australia. These details should be available for analysis and policy development.</p> <p><b>Department’s response:</b> Agree</p>
----------------	--

Dr Michael Bond  
Interim Inspector-General of Biosecurity

June 2015

**Acknowledgements**

In undertaking this audit, the IIGB received generous cooperation and helpful advice from industry organisations, companies and individuals, and Australian Government Department of Agriculture staff. Their assistance is gratefully acknowledged.

# 1 Background

## Biosecurity risks: Pre-border

1.1 Stockfeed imports are a potential pathway for animal and plant diseases to be introduced to Australia. Stockfeed production conditions vary substantially for each type of product. The greatest variations are in: the country of origin of various ingredients; type and scale of production; methods of harvesting, threshing, storage and collection of the raw materials; processing into stockfeed meal and subsequent storage, transport and end use (DAFF 2011a). Animal-derived material or other quarantine risk material can enter the import pathway from:

- animals housed or grazing in close proximity to growing or harvested crops; these animals may have contaminated faeces, urine, saliva, feathers, dander and hair
- poor rodent/bird control in areas where raw material and processed products are stored
- soil, plant trash, viable crop and/or weed seeds in raw material
- manufacturing processes not meeting Australia's requirements
- contamination of stockfeed from spillage of unprocessed materials from, for example, cross-over conveyors and augers
- unprocessed residues accumulating in inaccessible points in the manufacturing system
- processed animal-derived materials (such as meat meal, blood and bone meal, tallow and additives) stored near raw material and/or processed stockfeed
- access of rodents/birds to processing area and final product storage
- contaminated conveyances (trucks, railcars, grabs, ships' holds)
- changes in production processes not notified to the department.

## Suspected case of biosecurity breach

1.2 In 2010 the Australian Government Department of Agriculture and the New South Wales Department of Agriculture investigated a case of cysticercosis in a beef feedlot. The infection is caused by *Cysticercus bovis*, the larval stage of the human tapeworm. Although investigators suspected the infection was caused by contaminated imported copra meal, they were unable to show a definitive link between the outbreak and the imported feed.

1.3 The department had conducted a routine audit of the overseas manufacturing facility, a few months before the cattle were infected in Australia. The audit found that the temperature reached during processing of the meal significantly exceeded the department's stockfeed requirements (greater than 85 °C for more than 3 minutes) and that processing took place in a fully enclosed circuit with limited risk of contamination. Contamination with human faecal matter could have occurred by deliberate action before the feed was bagged. No similar occurrences of *Cysticercus bovis* have been detected, and this appears to have been an isolated incident.

## Import requirements

- 1.4 The department's Import Conditions Database (ICON) sets out the import requirements for stockfeed of plant origin, for each country of export.
- 1.5 A permit is required to import stockfeed of plant origin into Australia. Particular types of stockfeed can be imported into Australia from approved manufacturing facilities and are subject to specific import requirements, pre-border and at the border.

## Import volumes

- 1.6 The department records only data for stockfeed imported in bulk in ships' holds. The current information technology system based on Australian Customs and Border Protection Service (Customs) tariff numbers does not allow recording of quantities of stockfeed of plant origin imported either loose or bagged in containers (ACERA 2013). Table 1 shows volumes of various stockfeed types (bulk in ships' holds) imported between 2009 and 2013.

**Table 1 Import volumes, various stockfeed types (bulk in ships' holds only), 2009 to 2013**

Commodity	2009	2010	2011	2012	2013
Soybean meal	476 841	478 394	539 075	466 823	590 968
Palm kernel expeller	115 406	15 000	5 700	na	12 240
Palm acid oil	19 831	25 406	19 582	12 622	19 806
Molasses	na	na	6 580	4 906	3 500

Note: Figures are in metric tonnes. **na** Not available.

Source: Department of Agriculture, Canberra

## Australian entry ports

- 1.7 The North East (Brisbane), Central East (Sydney) and South East (Melbourne) regions are the major ports of entry for bulk stockfeed in Australia. Much smaller quantities are received in the South West region (Adelaide and Perth).

## Import risk analysis

- 1.8 An import risk analysis (IRA) identifies, assesses and classifies potential biosecurity risks associated with trade in a particular commodity. An IRA is conducted within a consultative framework and recommends risk management measures to be applied in meeting Australia's appropriate level of protection for trade, as outlined in the *Import risk analysis handbook 2011* (DAFF 2011b).
- 1.9 The department published an import risk analysis (IRA) for importation of heat-processed stockfeed of plant origin in 1999. The IRA identified animal diseases and pest risks and management options, and was used to develop conditions for importing heat-processed stockfeed of plant origin. In 2011, this IRA was used to develop policy guidelines for imported stockfeed of plant origin. All permit applications to import plant-based stockfeed are assessed against these guidelines. Risk assessment for plant-based stockfeed imports is based on two department policies (see paragraph 1.10).

## Biosecurity policies

1.10 The department's Animal Biosecurity Branch developed two internal documents that set out the risk mitigation policy for imported stockfeed of plant origin:

- Guidelines on the policy for imported stockfeed of plant origin (DAFF 2011a).
- Importation of stockfeed and stockfeed ingredients—finalised risk management measures for transmissible spongiform encephalopathies (TSEs) (AFFA 2003).

## Relevant legislation

1.11 Importation of stockfeed of plant origin is governed by the *Quarantine Act 1908* and regulations. The Act provides for the Governor-General to prohibit, through the Quarantine Proclamation 1998, importation of goods into Australia that are likely to introduce disease or pests.

1.12 The following sections of the Act relate to importation of stockfeed of plant origin into Australia:

- the *Quarantine Act 1908*, sections 5(1) and 13(1)(d) and (e)
- the Quarantine Proclamation 1998, Part 5, sections 32 (Table 12) and 33(1).

1.13 The Act enables the Commonwealth to take quarantine measures to deal with diseases and pests in Australia. The Act provides:

- the legal basis for preventing or controlling the entry of plants and plant products into Australia
- the legal basis for managing the quarantine risk arising from plant-derived commodities after arrival in Australia
- powers for the Director of Quarantine and quarantine (biosecurity) officers to deal with quarantine matters
- powers and responsibilities of biosecurity officers
- offences and maximum penalties for any contravention of the Act.

## Audit objective, scope and methodology

1.14 To examine how effectively the department manages the biosecurity risks associated with the importation of stockfeed of plant origin into Australia, the IIGB placed particular emphasis on:

- import conditions and permits—adequacy of import requirements in managing biosecurity risks and identification of the requirements for importing plant-based stockfeed
- certifications and declarations—adequacy of accompanying documentation in addressing biosecurity risks
- assessment of verification systems that the department has in place to ensure compliance with applicable import conditions (and assessing the possibility of diversion of other imported commodities to stockfeed)
- border activity—assessment of verification inspection procedures for imported stockfeed consignments



- identification of any potential improvements to Australia’s import procedures, operations and/or documentation for plant-based stockfeed to further mitigate any biosecurity risks.

1.15 The audit did not include:

- pre-border operations—verification of practices and procedures of overseas manufacturing facilities engaged in production of plant-based stockfeed for export to Australia
- biosecurity import risk analysis and policies in relation to the import of plant-based stockfeed
- importation of animal-based stockfeed, including stockfeed supplements, pet and fish food, aquaculture feed and microalgae
- international trade aspects (for example, allocation of tariffs)
- any commercial considerations.

### **Audit methodology**

1.16 The IIGB undertook audit fieldwork in three regions:

- Newcastle (Central East region)
- Melbourne (South East region)
- Perth (South West region).

1.17 During fieldwork at regional offices, the IIGB held discussions with department staff about assessment of border clearance and verification systems that the department has in place to ensure compliance with the relevant import requirements for import of plant-based stockfeed. Discussions covered:

- import requirements and clearance procedures
- certifications and declarations
- inspection requirements and procedures
- staff experience and training to undertake on-arrival inspections
- criteria and rate of sampling for ruminant DNA testing (where applicable)
- information systems used in decision-making and recording data/information (such as ICON, ICS, AIMS and Quarantine Premises Register (QPR))
- work instructions and standard operating procedures relevant to inspection procedures
- internal communication
- performance of third-party QAPs for storage of imported product
- record check and sampling for (non)compliance.

### **The audit team**

Auditors Dr Naveen Bhatia and Ajay Singh assisted the IIGB in this audit.

## 2 Pre-border controls

### Pre-border risk mitigation: historical perspective

- 2.1 Before 2003 the only stockfeeds of plant origin permitted for importation into Australia were from New Zealand, the United States and member countries of the Secretariat of the South Pacific Community. Import permits for stockfeed of plant origin from these approved countries were issued freely without a detailed risk assessment. From early 2003 stockfeed was also sourced from other countries such as Malaysia, the Philippines, Sri Lanka and Indonesia.
- 2.2 With increased interest in the importation of stockfeed from other (non-approved) countries, the department drafted a policy on importation of stockfeed and stockfeed ingredients. This policy outlined risk management measures for TSEs (see paragraph 1.10). The TSE policy and the department's IRA (AQIS 1999) for heat-processed plant-based stockfeed policy (finalised in 1999) have since been used to assess stockfeed import applications.
- 2.3 Under the department's 1999 stockfeed policy, plant meals from the United States, and copra meal and palm kernel expeller meal from member countries of the Secretariat of the South Pacific Community were permitted for import under existing import conditions. However, the risk matrix in the TSE policy indicated that the importation of these commodities was subject to a mandatory desk audit of the manufacturing facility.

### Biosecurity risk management

- 2.4 Animal feeds pose a high biosecurity risk because they are fed directly to animals, often in rural environments. This practice provides a direct pathway for exotic animal and plant pests and diseases to enter and establish in Australia.
- 2.5 The department undertakes risk assessment and management measures to minimise entry of pests and diseases into Australia through imported stockfeed of plant origin. These risk assessment and management measures are discussed in paragraphs 2.6–2.15.

### *Plant risk analysis*

- 2.6 The department undertakes a plant risk assessment for stockfeed of plant origin. Generally, the plant biosecurity risks are adequately addressed by the appropriate processing of raw materials (for example, achieving minimum core temperature requirements during processing, to mitigate animal pathogen risks) and post-processing procedures designed to minimise risk of contamination and infestation.
- 2.7 The department does not have a specific policy for assessing biosecurity risks associated with importing plant-based stockfeed. This is because only a few specific plant-based stockfeed products are regularly imported from overseas. The department's Plant Import Operations Branch seeks policy advice from the Plant Biosecurity Branch on a case-by-case basis, particularly when contamination (for example, weed seeds or whole grains) is found on inspection.

### ***Animal risk analysis***

- 2.8 The department conducts assessments on the animal disease risk status for a range of plant-based stockfeed commodities and the source countries. The risk assessments are based on the bovine spongiform encephalopathy (BSE) and foot-and-mouth disease (FMD) country listing maintained by the department's Biosecurity Animal Division. The department has developed a schematic decision tree, which provides guidance on the level of assessment and/or audit required, depending on the level of source country disease risk and the degree to which the commodity has been processed/treated during manufacture (DAFF 2011a).

### ***Desk and verification audits***

- 2.9 Stockfeed imports are subject to risk assessment through desk audits and, where required, in-country verification audits (Figure 1). Audit processes verify that the manufacturing facilities produce stockfeed that meets Australia's import requirements.

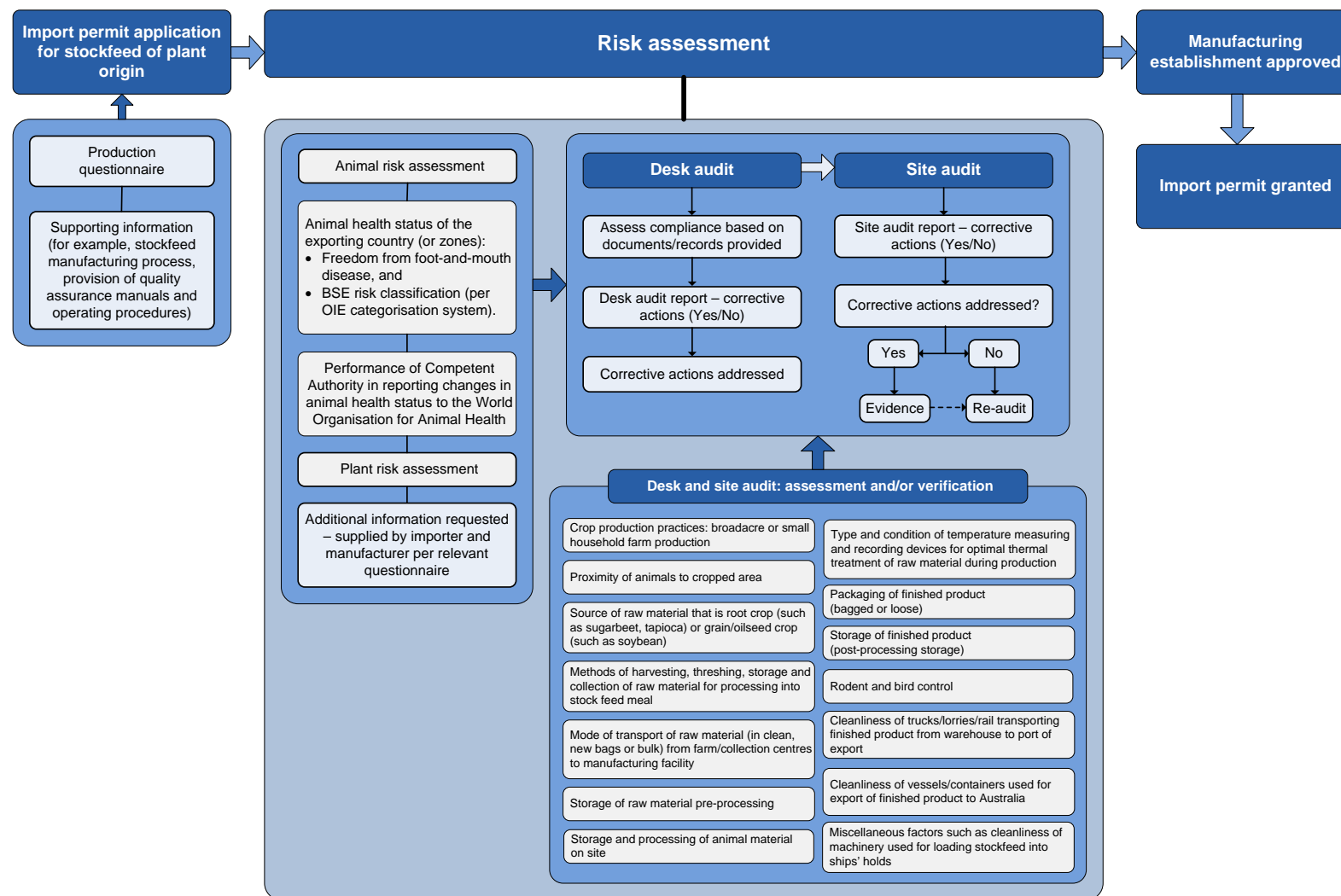
### ***Production questionnaire***

- 2.10 Plant Import Operations Branch staff, as part of their import permit assessment process, send out a production questionnaire to the manufacturers of plant-based stockfeed. The questionnaire seeks specific information, such as: raw ingredients, their storage, cleaning (pre-manufacturing); manufacturing process details; and packaging, storage and transport out of the establishment to the point of export. The questionnaire must be completed by the manufacturer. The information is used during desk audits to assess how effectively identified biosecurity risks are being managed at each establishment.

### ***Import permit***

- 2.11 An import permit is required for all imported stockfeed. The import permit imposes a level of assurance based on the department's risk assessment (for animal and plant diseases) for each pathway (Figure 1). The permit is a directive to the importer that stipulates conditions that their consignment(s) must meet to allow entry and release into Australia.
- 2.12 The department issues an import permit for a specific stockfeed product from an approved country and for a specific manufacturing establishment. For importation of a plant-based stockfeed from more than one approved country, a separate import permit application must be lodged for each country. An import permit is usually valid for two years, permitting unlimited import of a specified product from an approved country. Occasionally, single-use permits are issued for importing plant-based stockfeed for controlled use (for example, poultry feed trials) within a quarantine approved premises (QAP). Such import permits have specific import requirements, issued for one-time import of a stockfeed sample, and their use is generally regulated by the department. Similarly, a single-use import permit is also required for import of returning Australian produce (for example, when a livestock vessel has broken down outside Australian waters and the ship is required to return to Australia).

Figure 1 Department of Agriculture—process for assessing import permit applications for stockfeed of plant origin



Note: **BSE** Bovine spongiform encephalopathy. **OIE** World Organisation for Animal Health.

Source: Interim Inspector-General of Biosecurity

***Phytosanitary certification***

- 2.13 Each plant-based stockfeed consignment must be accompanied by a phytosanitary certificate that certifies the consignment meets Australia's import requirements in relation to risks associated with plant pathogens.

***Manufacturer's declaration***

- 2.14 A mandatory declaration is also required from the manufacturer of the stockfeed, declaring that the ingredients, processing, packaging, storage and transport meet Australia's import requirements.

***Inspection***

- 2.15 All stockfeed consignments are subject to physical inspection by the department's biosecurity officers on arrival. Inspections aim to verify that Australia's import requirements have been met and that the product is not infested or contaminated with biosecurity risk material, pests or diseases.

***Approval of overseas manufacturing facilities***

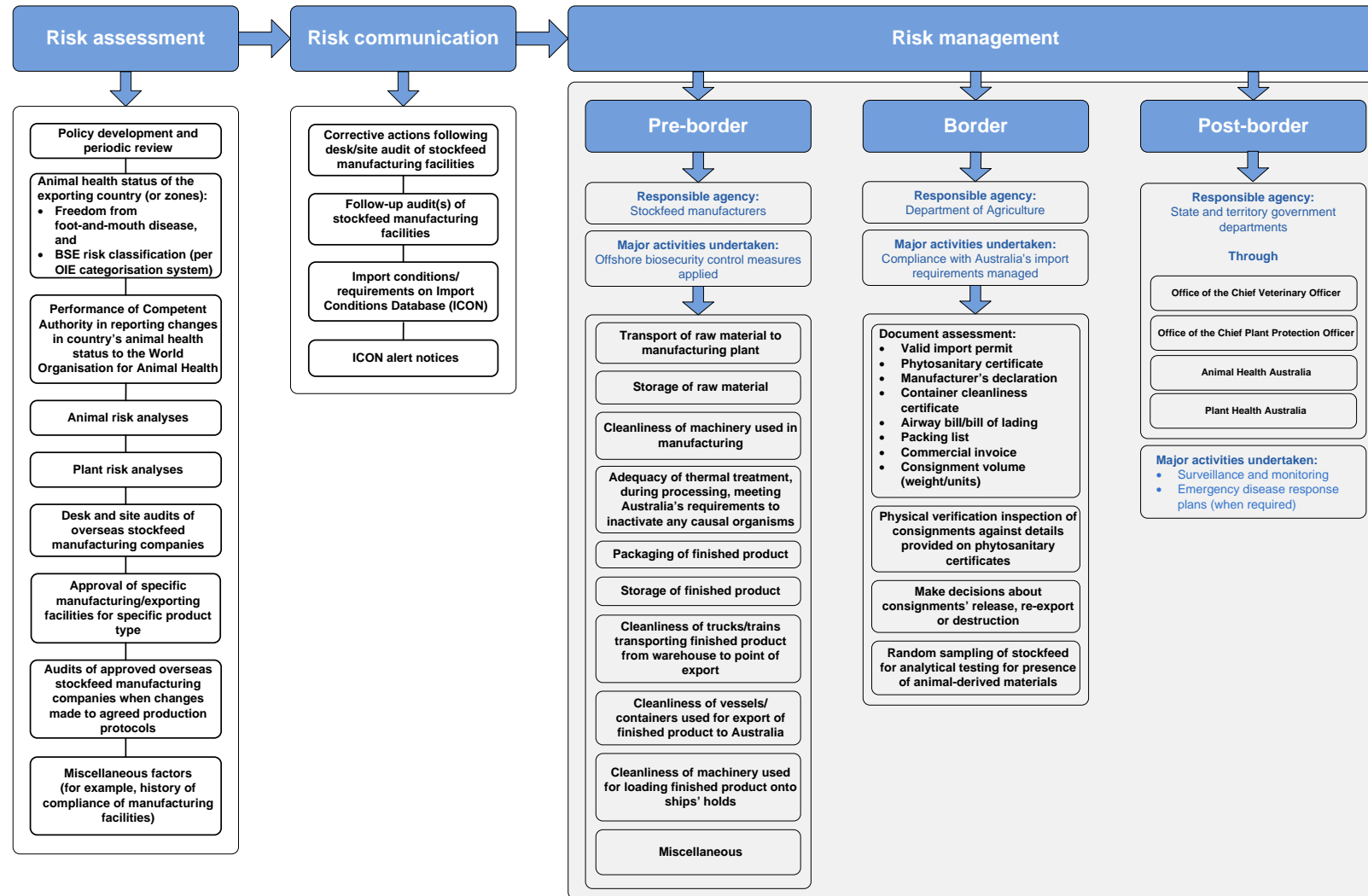
- 2.16 The department undertakes a comprehensive risk assessment of each stockfeed manufacturing facility before granting an import permit. The risk assessment process commences on receipt of an import permit application. As part of this process, manufacturers are also sent a questionnaire covering the whole production process (the additional processing information required to undertake a desk audit) and importers pay the fees associated with processing their application for an import permit.
- 2.17 Approved manufacturing facilities and their audit history are listed at Appendix B.

## 3 Border controls

### Administrative controls

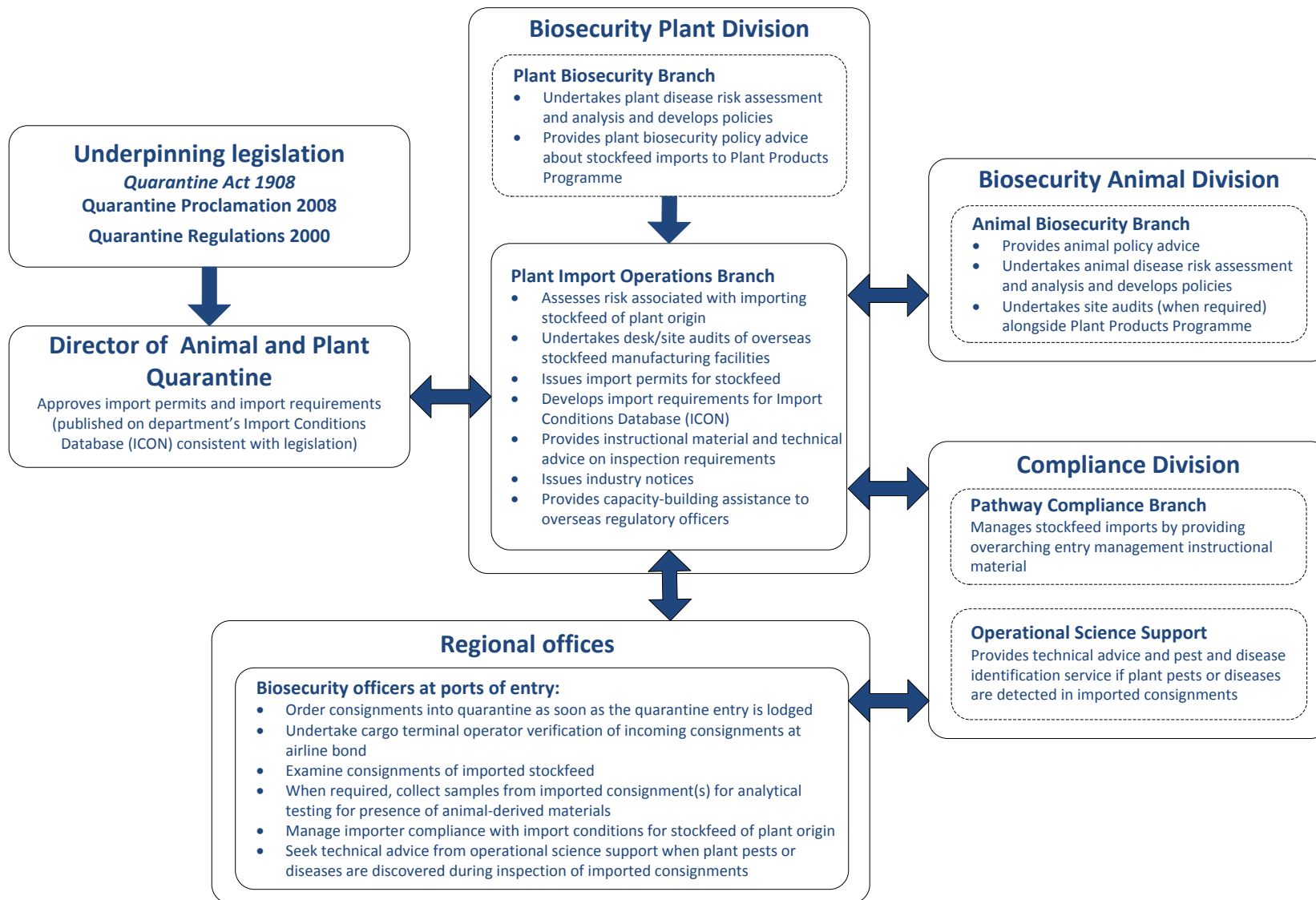
- 3.1 The importation of stockfeed of plant origin is jointly managed nationally by three divisions in the department:
- Biosecurity Animal Division
  - Biosecurity Plant Division
  - Compliance Division.
- 3.2 The Animal Biosecurity Branch (Biosecurity Animal Division) assesses animal biosecurity risks and develops policies for import of stockfeed of plant origin. The branch rarely undertakes verification audits of overseas stockfeed manufacturing establishments with the Plant Import Operations Branch.
- 3.3 The Plant Import Operations Branch (Biosecurity Plant Division) manages the risk of introduction of exotic pests and diseases through the regulation of importation of stockfeed. Its activities and responsibilities include:
- assessment of import permit applications, consideration of relevant risk advice and issue of import permits for stockfeed; these activities help ensure that import conditions adequately address biosecurity risks
  - provision of technical advice on importing stockfeed to relevant biosecurity officers (including those at the Bulk Commodities National Coordination Centre), importers and the general public to ensure consistent inspection and clearance and compliance with biosecurity legislation
  - development and maintenance of import conditions and protocols for stockfeed on the Import Conditions Database (ICON)
  - participation in pre-border and border assessments, audits and appraisals designed to maintain the integrity of the biosecurity continuum (Figure 2).
- 3.4 Entry management officers (managed by the Compliance Division) assess the validity and compliance of accompanying documents with Australian import requirements, allocate appropriate officers to inspect specific consignments and issue AIMS directions to inspectors who then verify, inspect and clear the imported consignments.
- 3.5 Compliance Division officers in the regions undertake inspection and clearance of imports in accordance with import conditions.
- 3.6 Roles, responsibilities and relationships between the department's various areas (divisions and branches, and sections within them) and the responsibilities of the regional offices are shown in Figure 3.

Figure 2 Department of Agriculture—control measures for stockfeed imported into Australia



Note: **BSE** Bovine spongiform encephalopathy.  
 Source: Interim Inspector-General of Biosecurity

Figure 3 Department of Agriculture—international, national and regional roles and responsibilities for importing stockfeed



Source: Interim Inspector-General of Biosecurity



## **Bulk Commodities National Coordination Centre**

- 3.7 The Bulk Commodities National Coordination Centre (Bulk Commodities NCC) at Newcastle helps manage biosecurity risks associated with the supply and importation of bulk commodities in ships' holds by aiming for national consistency in processing biosecurity clearances. The Bulk Commodities NCC does not manage or assess compliance with import conditions for bulk or bagged stockfeed imported in containers.
- 3.8 The Bulk Commodities NCC was established in 2006 to manage and assess compliance with import permit conditions at a national level. Activities include:
- assessing documents that accompany all bulk vessel imports of stockfeed to ensure they are complete
  - recording national data (import quantities) for bulk vessel stockfeed imports
  - providing technical (physical inspection) and administrative support (processing accompanying documents) to regional biosecurity staff, and technical support (import requirements) to industry stakeholders
  - providing a national link between the department's operational areas (Pathway Compliance and Plant Import Operations branches) in relation to bulk imports of stockfeed.

## **Import requirements**

- 3.9 The department's ICON database provides information on import requirements for stockfeed of plant origin. Examples of stockfeed listed on ICON in the 'Stockfeed of plant origin' commodity category include: canola seed meal, coconut oil, copra expeller pellets, copra meal, corn gluten meal, corn meal, cottonseed meal, groundnut meal, guar meal, kibbled grain, kibbled meal, lucerne meal/pellets, maize gluten meal, maize meal, molasses, neem cake, neem oil, niger seed expeller cake, palm kernel expeller, palm kernel meal, palm oil, peanut meal, sesame seed cake, soy bean meal, soybean oil, sugar beet pellets, sugar beet pulp, sugar beet pulp powder, tapioca pellets and vegetable oil.
- 3.10 A permit is required to import stockfeed of plant origin. Many types of stockfeed of plant origin can be imported into Australia from approved manufacturing establishments and these are subject to specific import requirements listed on individual import permits. The department considers an exporting country's animal health status before an import permit is issued for a specific product. In determining a country's animal health status in relation to stockfeed of plant origin, consideration is given to exotic animal diseases that:
- would have serious consequences if introduced into Australia
  - are potentially spread via carcass parts, feathers, faeces and other risk material
  - might come into contact with plant-based stockfeed and its ingredients.
- 3.11 In addition, the department also considers whether an exporting country:
- routinely reports to the World Organisation for Animal Health (OIE) on significant animal disease outbreaks
  - has an effective national veterinary service or animal disease surveillance and/or control programmes in place (DAFF 2011a).

- 3.12 An import permit is not issued if the department determines that the risk is too high (consistent with Australia's appropriate level of protection) from an exporting country.

### **Lodgement of consignments**

- 3.13 The department uses two interlinked electronic information management systems for clearing stockfeed at the border: the Integrated Cargo System (ICS), managed by the Australian Customs and Border Protection Service (Customs), and the Agriculture Import Management System (AIMS), managed by the Department of Agriculture.
- 3.14 Goods imported into Australia are classified under the *Customs Tariff Act 1995*. A memorandum of understanding between the department and Customs establishes and supports the collaborative working relationship and defines the respective border protection and biosecurity responsibilities of each party.
- 3.15 The ICS automatically refers import consignments of biosecurity concern to AIMS. Some of these referrals are based on tariff codes targeted by profiles set by the department. The department uses AIMS to profile, target and record movement of imported consignments as part of arrival clearance procedures. Biosecurity officers at the first port of arrival are responsible for clearing imported consignments in their region.

### **Tariff codes for stockfeed of plant origin**

- 3.16 Goods imported into Australia require classification under the *Customs Tariff Act 1995*, which is administered by Customs. Imported stockfeed consignments are declared under relevant tariff codes. Consignments of stockfeed are automatically directed to the department for biosecurity risk assessment. For example, soybean meal is identified through tariff code 2304.00.00 and sugar beet pallets through tariff code 2303.20.00. However, a large number of permitted stockfeed varieties do not have a specific tariff code and consequently cannot be accurately identified through the ICON database.

### **Entry management**

- 3.17 Containerised (bagged or bulk) consignments are processed by the department's entry management team through the department's new national delivery system, Compliance and Assessment Management Services (CAMS). Brokers or agents must lodge relevant documents and entry details with CAMS staff, who assess whether document requirements have been met and then assign the appropriate quarantine direction to the entry. Steps in the entry management of containerised (bagged or bulk) consignments are:
- importer/broker submits documents (see certifications and declarations in paragraph 3.38)
  - department issues an AIMS direction (in writing) to the importer/broker
  - importer/broker presents AIMS direction to the department's biosecurity officer
  - the biosecurity officer checks AIMS for import permit validity (currency) and conditions for imported stockfeed
  - the biosecurity officer externally inspects the landed cargo to ensure integrity of the containers and also for freedom from foreign pests and diseases and freedom

from quarantine risk material attached to the container, and directs transport of container(s) to a designated QAP

- at the QAP, if AIMS and import permit are in order, biosecurity officer requests the importer (or agent) to unpack consignments and inspection proceeds
- if there are any biosecurity concerns (for example, if packaging is old or damaged, contaminated with animal-derived material such as feathers or bones, or whole grain or seeds are found) or if import permit stipulates testing, the biosecurity officer collects samples for testing for presence of ruminant DNA (see paragraphs 3.41 and 3.42)
- if there are issues with AIMS or import permit inspection cannot proceed, the consignment is held and client is advised of any required action
- at completion of the physical inspection at a QAP, the department advises the client of the outcome and AIMS is updated by the biosecurity officer.

3.18 Consignments imported in bulk in ships' holds are processed through the Bulk Commodities NCC at Newcastle. The importer/broker contacts the NCC at least five working days before the vessel's arrival, to confirm:

- the vessel's name, port(s) of discharge and estimated time of arrival at each port
- all arrangements for inspections and treatments.

3.19 Steps in entry management of bulk imports in ships' holds are:

- pre-arrival documentation is submitted to the Bulk Commodities NCC (see paragraph 3.38) who make an assessment based on import permit conditions
- vessel schedule is raised by the Bulk Commodities NCC and distributed to the discharge port(s)
- AIMS entries are raised through the Customs ICS system
- consignments are subject to initial onboard sampling
- at the first port of entry, once initial onboard sampling inspection is satisfactorily completed, discharge is permitted; if documents are not satisfactory or contamination/infestation is recorded, biosecurity officer suspends the inspection and seek advice from the Plant Import Operations Branch
- product is discharged and transported to a nominated QAP
- landed product inspections are completed at the QAP(s) and port(s) of discharge
- consistent with the vessel's schedule, at any subsequent ports of discharge, the importer/broker submits a request to process entry
- AIMS entry is processed by Entry Management staff at the discharging port (in the region)
- landed product inspections are completed at each port of discharge by biosecurity officers
- during inspection, imported stockfeed may be sampled for testing for the presence of animal-derived material such as ruminant DNA (see paragraphs 3.40–3.42).

3.20 At various points in the entry management process, and until the consignment is released, AIMS is updated to reflect any directions imposed and decisions taken as a result of the biosecurity assessment or inspection process.

## **National Appointment System**

3.21 In order to further improve department-industry liaison, the department has initiated an electronic booking system to replace the manual process for allocating appropriately skilled/experienced officers to inspect imported stockfeed consignments. The National Appointment System (NAS) extracts data entries from AIMS, allowing entry management officers to create and amend appointments for biosecurity officers. For greater efficiency, appointments created in NAS are automatically exported to the relevant biosecurity officer's Microsoft Outlook calendar, making it easier for biosecurity officers to move on to the next job when they are out in the field.

## **Border clearance and verification inspection**

3.22 All stockfeed consignments of plant origin require inspection (Figure 4). Inspection requirements differ for containerised and bulk consignments and are listed on individual import permits, for the biosecurity officer to follow.

### **Containerised (bulk or bagged) consignments**

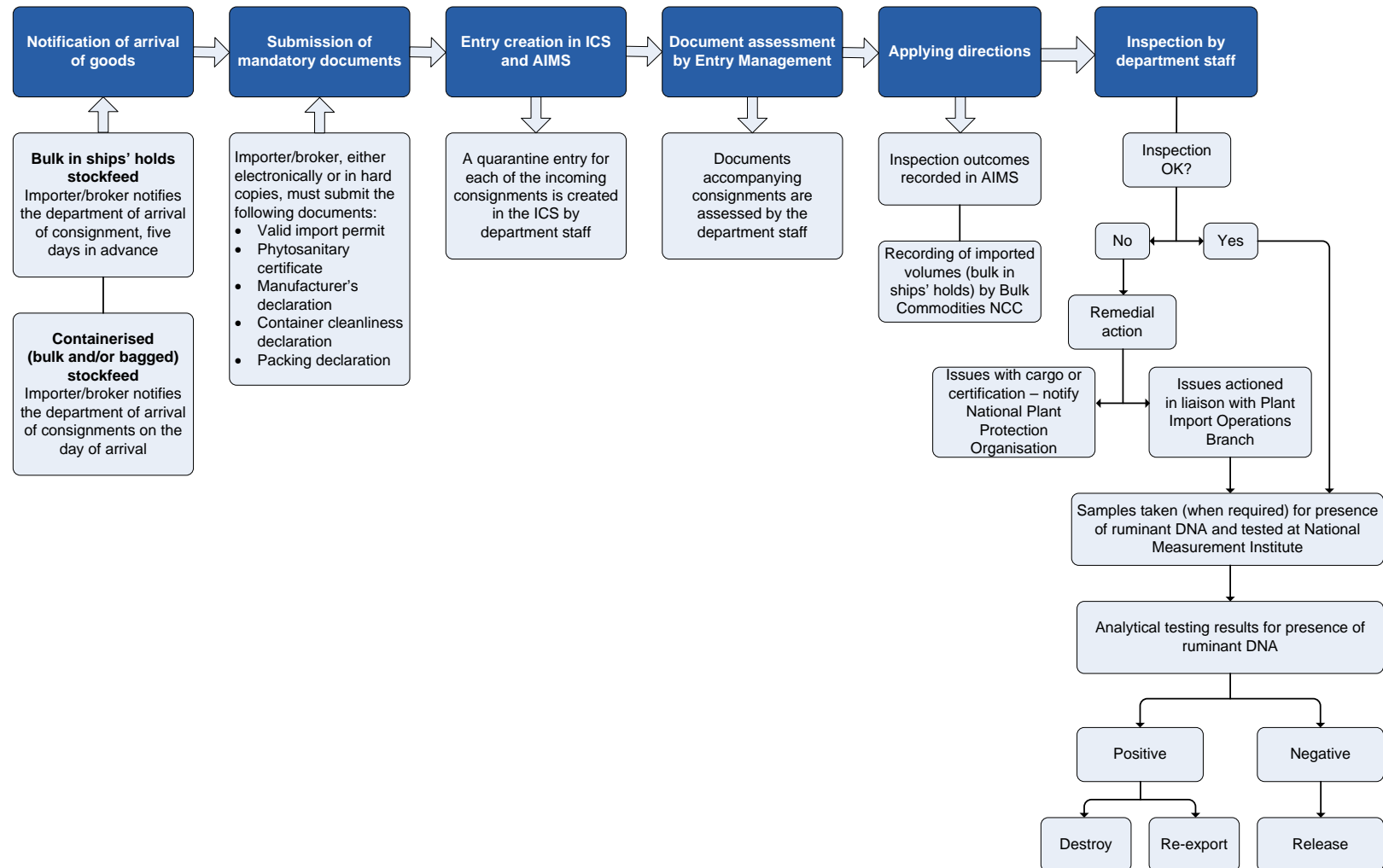
3.23 Containerised consignments ('seals intact') are directed to a QAP in the metropolitan area of the port of arrival or a storage facility in the wharf area for a 'full unpack' inspection. The quantity to be unpacked is at the discretion of the biosecurity officer and should be sufficient to ascertain that the import conditions have been met. The inspection should confirm that:

- the product is packaged in clean, new packaging
- the product's packaging is in sound condition
- the commodity is free from live insects, soil, disease symptoms, prohibited seeds, other unprocessed plant material (for example, leaf, stem material, fruit pulp and pod material), animal material (for example, animal faeces and feathers) and any other extraneous contamination of quarantine concern.

3.24 Consignments meeting these conditions may be released from quarantine.

3.25 The department requires all containerised (bagged and bulk) consignments to be directed to a metropolitan QAP (Class 1.1, 1.2, 1.3, 2.2 or 2.3) for inspection.

Figure 4 Department of Agriculture, border controls and decision points for import of stockfeed of plant origin into Australia



Note: **AIMS** Import Management System, managed by the Department of Agriculture. **ICS** Integrated Cargo System, managed by the Australian Customs and Border Protection Service. **NCC** Commodities National Coordination Centre, Department of Agriculture.  
 Source: Interim Inspector-General of Biosecurity

## **Bulk consignments in ships' holds**

3.26 Inspection of bulk consignments in ships' holds is performed only by biosecurity officers who are trained and accredited to perform bulk inspections. Inspection of a bulk commodity is performed in two stages:

- Stage 1—visual inspection of the hold is conducted at the first port of call and during daylight hours. The inspector checks for biosecurity concerns in areas such as bulkheads, cable casings, decks, deck head beams, hatch combings and perimeters, hatch covers, ladders, pipes, ribs, spar ceilings/brackets and ventilator shafts. The inspection of each hold is performed from the deck and may involve using binoculars. This inspection also includes checking the surface of the commodity for obvious contamination. A commodity inspection is then performed, which requires a trier sample to be taken from the grab as it lifts stockfeed out of the hold.
- Stage 2—landed inspection of bulk or bagged bulk product that has been discharged from a ship and has been either loose loaded into a QAP storage facility (in the case of bulk product) or stored in its bags (in the case of bagged product). Landed inspections are performed in every port where the commodity is discharged.

3.27 Inspection of bulk consignments in ships' holds involves the biosecurity officer verifying that the consignment is free from live insects, soil, whole seeds and plant/animal debris, and that the stockfeed is packaged in clean, new bags.

3.28 In all cases, inspection is performed on each sample, with a decision to pass or fail affecting the whole consignment or shipload. Any consignment that fails inspection is treated (if a suitable treatment is available), exported or destroyed.

## **Quarantine approved premises**

3.29 The department has specific requirements for QAPs that are used for storage and landed inspection of imported stockfeed consignments. The 'Entry Management' section of the Import Conditions Database (ICON) lists which classes of QAPs are authorised to store imported consignments. These QAP classes are:

- Class 1.1, 1.2, 1.3, 2.2 or 2.3—imported containerised (bagged or bulk) consignments
- Class 1.1, 1.2, 1.3 or 2.2—less-than-contain-load (LCL) and airfreight consignment types
- Class 2.3—bulk or bagged consignments in ships' holds.

3.30 The category of QAP to which consignments must be transported on landing is specified in the conditions of the import permit. A class 2.3 QAP is inspected daily by a biosecurity officer at the importer's expense.

3.31 QAPs are operated by a third-party provider (not the importer or buyer). The department's Compliance Arrangements Branch (Compliance Division) approves and regularly audits all QAPs to ensure ongoing compliance.

## **Contaminated or infested consignments**

- 3.32 Biosecurity officers visually inspect imported consignments stored at a QAP. If officers find a contaminant, they assign it to one of the following categories:
- live insects
  - plant material or seed
  - animal material
  - pellets/meal of organic origin
  - soil or mineral
  - unknown
  - synthetic.
- 3.33 Until the type of contaminant is determined and directions for treatment are provided, contaminated consignments are held securely and segregated. They remain sealed until cleared by the Bulk Commodities NCC (if bulk in ships' holds imports) or the regional manager (if containerised imports) in consultation with the department's Plant Import Operations Branch.
- 3.34 Inspection outcomes are recorded in the AIMS database.

## **Packaging requirements**

- 3.35 Bulk (loose) in vessel imports: for bulk (loose) import in ships' holds, the vessel holds must be clean (certified by an approved third party at the port of export) before the product is loaded. A vessel cleanliness certificate is required by the department at the entry port.
- 3.36 Containerised imports: before export containers must be thoroughly cleaned before being filled with the product. A container cleanliness certificate must be presented to the department at the first port of entry.
- 3.37 Bagged imports: for all bagged imports, the product must be packaged in clean, new bags. This is checked by a visual inspection undertaken by a biosecurity officer.

## **Certifications and declarations**

- 3.38 From the selected records reviewed at regional centres, the IIGB noted that the department's verification system is based on the following documents accompanying consignments:
- valid import permit
  - phytosanitary certificate
  - manufacturer's declaration
  - container cleanliness declaration
  - packing declaration.
- 3.39 Biosecurity officers at regional offices are responsible for clearing imported stockfeed consignments by:
- examining consignments of imported stockfeed for live pests, diseases and other quarantine risk material

- managing importer compliance with import requirements (as listed on the import permit)
- making decisions about consignments to be ordered into quarantine, re-treated, released or destroyed
- sampling, when required, for testing for presence of ruminant DNA in an imported consignment (see paragraphs 3.40–3.42).

### **Testing for the presence of animal-derived material**

3.40 The testing for animal-derived material, including meat and bone meal, is based on the detection of specific DNA sequences present in the species or taxon of interest (for example, ruminant). Tests use real-time polymerase chain reaction (PCR) methodology.

3.41 Sampling for the presence of animal-derived materials is done by the biosecurity officer undertaking entry inspections. Mandatory analytical testing of imported stockfeed consignments is only required for animal-derived materials in imported stockfeed of plant origin if any of the following situations occur:

- Suspect non-compliance with import permit conditions—the department’s Plant Import Operations Branch has occasionally applied a testing requirement as a condition of entry on the import permit. This can provide a level of assurance that the commodity complies with Australia’s import conditions, particularly when the manufacturing facility is known to process or store animal-derived commodities on site.
- Damaged or dirty packaging—conditions stipulated in the (ICON) database provide for an analytical test option if the inspector deems there is a risk of contamination from dirty, used or damaged packaging.
- Cleanliness of bulk containers—testing may be required if the department finds problems with the cleanliness of the container or where contamination is detected in a container.

3.42 When sampling material, biosecurity officers who are inspecting and clearing imported stockfeed follow inspection directions listed in the Compliance and Assessment Management System. Only a small proportion of imported consignments require analytical testing for the presence of animal-derived materials.

### **Operational science support**

3.43 The department uses the national Operational Science Support (OSS) network to identify any suspect plant pests and diseases found in incoming consignments. The network is part of the department’s Compliance Division. It provides identification and diagnostic services to officers who encounter any suspect plant pests and diseases during inspection of imported consignments.

3.44 Biosecurity officers inspecting imported stockfeed consignments prepare samples for transport to OSS laboratories for identification of invertebrates, pathogens and seeds. The department has a movement protocol that outlines procedures for safe and secure transfer of live/viable samples between quarantine intervention points and OSS laboratories (DAFF 2013a).



3.45 In the South East and Central East regions, OSS staff are available to advise programmes whether a pest is actionable and to provide treatment options. Officers at the Bulk Commodities NCC (Newcastle) office have a dedicated web-linked microscope, which can provide real-time digital images of suspect pests or seeds to the OSS staff based at the Sydney office.

## 4 Observations and findings

- 4.1 The IIGB and audit team undertook fieldwork at three regional centres. One visit coincided with a recently arrived imported consignment of stockfeed that was being presented for inspection. No overseas manufacturing establishments were inspected or audited.

### Assessment of pre-border biosecurity risks

- 4.2 The department's Biosecurity Animal Division maintains an ongoing risk assessment framework (Figure 1), which it uses to update each exporting country's animal health status for stockfeed of plant origin. Particular attention is given to those exotic animal diseases that:
- would have serious consequences if introduced into Australia
  - could be spread via carcass parts, feathers, faeces and via other risk material that might come into contact with plant-based stockfeed.
- 4.3 The department classifies an exporting country as having *high or undetermined animal pathogen risk status* in relation to stockfeed of plant origin if that country:
- has one or more of the following endemic diseases:
    - transmissible spongiform encephalopathies, such as bovine spongiform encephalopathy ('mad cow disease')
    - foot-and-mouth disease
    - swine vesicular disease
    - classical swine fever
    - peste des petits ruminants
    - virulent Newcastle disease
    - highly pathogenic avian influenza.
  - does not routinely report to the OIE on significant animal disease outbreaks
  - does not have an effective national veterinary service or animal disease surveillance and/or control programmes in place.

The assessment of risk associated with infectious bursal disease of chickens is given special consideration due to the high heat resistance of the virus and presence of very virulent and variant strains in virtually all countries other than Australia and New Zealand.

- 4.4 An exporting country is classified as *low animal pathogen risk status* if it has none of the diseases listed in 4.3, reports routinely and in a timely manner to the OIE on significant animal disease outbreaks, has an effective national veterinary service and appropriate animal disease surveillance and control programmes in place.

### Import risk analysis

- 4.5 Import of plant-based stockfeed into Australia has a long history and controls to minimise biosecurity risks associated with imports have been in place for several decades. The

department published an import risk analysis (IRA) for heat-processed stockfeed of plant origin in 1999. The IRA primarily identified animal diseases and pest risks and management options; and was used to develop conditions for importing heat-processed stockfeed of plant origin. In 2011 this IRA was used in developing policy guidelines for importing stockfeed of plant origin. All permit applications to import plant-based stockfeed are currently assessed against the IRA, policy guidelines and the TSE stockfeed policy.

4.6 Stockfeed is a high-risk commodity. It has risks associated with:

- increased imports
- increased numbers of countries from which stockfeed products are sourced
- appearance of new animal and plant pathogens in source countries
- diversion of imported plant-based stockfeed to non-authorised end use(s).

Given these risks, the department's IRA and/or policies for import of stockfeed into Australia need to be reviewed and updated.

#### **Recommendation 1**

4.7 The department should review and update its import risk analysis and/or policies for importing plant-based stockfeed into Australia.

**Department's response:** Agree

The department agrees with this recommendation.

#### **Approval of manufacturing establishments**

4.8 The department undertakes a comprehensive risk assessment for each stockfeed manufacturing facility before granting an import permit (Figure 1). The risk assessment process commences on receipt of an import application form, together with the additional information required to undertake a detailed desk audit, and payment of necessary fees. The additional information required to assess risk includes the whole production system at that facility.

4.9 The risk parameters that are considered include:

- source of raw material
- animal disease status for the country
- any non-commodity or animal products processed or stored at the facility
- checks and controls that are in place
- processing details
- storage arrangements
- record keeping
- staff training
- security of finished product throughout the export pathway
- general hygiene.

The department also seeks information about the government certification authority. The department takes into account any prior desk or verification audit outcomes (such as any previous non-conformances) and any issues noted from trade history.

## **Desk audit**

- 4.10 The desk audit assesses whether the process and relevant records demonstrate that the finished product would meet Australia's import requirements. The risk parameters considered in a desk audit include (but are not limited to):
- animal disease status of the exporting country
  - source and storage of raw materials (pre-processing)
  - processing or storage of any non-commodity or animal products at the manufacturing facility being audited
  - processing details (including meeting Australia's temperature and duration requirements during processing)
  - maintenance of production/processing records
  - staff training information
  - storage and handling of finished product throughout the export pathway
  - general hygiene (including bird and rodent control) at the manufacturing facility.
- 4.11 On completion, the desk audit report is given to the importer. If any non-conformances are noted these must be addressed before progressing to the next stage. The department's animal biosecurity policy states whether the country/commodity pathway is able to be assessed solely through desk audit or whether a verification audit must be conducted. Where appropriate, a positive desk audit will progress to the granting of an import permit.

## **Verification audit**

- 4.12 Following a desk audit, if a verification audit is required the department notifies the importer. During a verification audit, the auditor physically verifies steps/processes at the manufacturing facility from receipt of raw material to transport of the finished product to the point of export. This is to confirm that no animal-derived materials, whole seeds or other materials of biosecurity concern could contaminate the final product, either through the manufacturing process or export pathway.
- 4.13 As per the department's verification audit requirements, the auditor prepares an audit report identifying any biosecurity risks. If necessary, the auditor issues corrective action notices to the importer and operators of the manufacturing facility. Any non-conformances noted during a verification audit must be addressed by the manufacturer before an import permit is granted. Examples of typical non-conformances are provided in 4.20.
- 4.14 The department considers that plant-based stockfeeds pose a higher biosecurity risk as a pathway for animal pathogens than for plant pathogens. However, verification audits of overseas manufacturing establishments are generally undertaken by the department's Plant Import Operations Branch staff. These verification audits are undertaken consistent with the department's quarantine policy for import of plant-based stockfeed

(DAFF 2011a). The IIGB was informed that staff from the department's Biosecurity Animal Division have occasionally participated in such verification audits (generally as observers). It was noted that the Plant Import Operations Branch staff possess minimum mandatory qualifications as lead auditors.

- 4.15 The Biosecurity Plant and Biosecurity Animal divisions would benefit from jointly undertaking future verification audits of overseas manufacturing establishments, particularly in approved countries that have relatively poor animal health status. This would ensure that both animal and plant biosecurity risks (pre-border) are adequately assessed and addressed in an appropriate manner offshore.

### **Recommendation 2**

- 4.16 The department's Biosecurity Plant and Biosecurity Animal divisions should jointly undertake desk and verification audits of overseas stockfeed manufacturing establishments to facilitate more effective pre-border compliance and reduce the risk of both plant and animal disease incursions.

#### **Department's response: Agree**

The department agrees with this recommendation and has convened a working group (Stockfeed Working Group) composed of Biosecurity Plant and Animal division officers tasked with facilitating greater collaboration between the two areas in the management of the biosecurity risks associated with the plant-based stockfeed pathway.

- 4.17 The department treats information referring to specific manufacturers, pathways and particular manufacturing processes as commercial-in-confidence. Consistent with the department's cost recovery policy, all costs associated with undertaking verification audits of overseas manufacturing facilities are borne by the importer.

### **Performance monitoring of approved manufacturing establishments**

- 4.18 The department aims to inspect approved manufacturing establishments every two years. Such inspections are designed to ensure ongoing compliance with Australia's pre-border requirements for:

- biosecurity risk management processes during manufacturing (for example, maintenance of recording instruments to ensure that temperature/time requirements are met)
- pre and post-production storage of stockfeed (for example, pest control)
- packaging (to ensure that the finished product is protected from post-production contamination with quarantine risk material)
- transport (export pathway).

- 4.19 The IIGB noted that the department has been monitoring the performance of approved manufacturing facilities at two-year intervals. The department neither undertakes unannounced inspections nor spot checks of approved manufacturing establishments. Instead, the department gives the manufacturer advance warning of an inspection and requests the presence at inspection of relevant officials and the provision of all relevant documents to the audit team. After arranging a date for inspection, the department's

audit team leader sends the manufacturer an agenda and scope of the proposed inspection.

4.20 After an inspection visit by department auditors, the manufacturer receives a report summarising all non-conformances (for significant biosecurity risks) and/or corrective actions (for minor biosecurity risks). Deficiencies (critical and non-critical non-conformances or issues) recorded by department staff at manufacturing establishments during 2012 and 2013 and corrective actions that department staff required manufacturers to undertake include:

- poor maintenance of (or non-functional, non-calibrated) instruments used for recording temperature during processing
- inadequate segregation of animal-derived materials, where a manufacturer produces other products
- inadequate pest and bird control around conveyors, storage facilities for raw materials and/or finished product
- inadequate cleaning records of transport vehicles
- inadequate segregation of packaged finished product for domestic use and export to Australia
- poor record keeping
- cross-contamination due to residue build-up in areas within the facility where cross-contamination is possible
- poor quality control checks for raw materials received at the facility
- uncontrolled entry of visitors to the manufacturing facility
- inadequate staff training records
- lack of operating procedure documentation and checklists for stockfeed production
- stray animals on site.

4.21 Based on the evidence provided to the IIGB, it appears that the routine two-year monitoring of each overseas manufacturing facility should be replaced by a more strategically targeted regime. In contrast, a system of random inspections/audits might be more appropriate for establishments that consistently demonstrate a high level of compliance with Australian import requirements. This could free resources to target those countries/facilities/commodities identified as higher biosecurity risks. Any such targeted audits would need to be undertaken in consultation and with the cooperation of the exporting country's relevant government authority.

**Recommendation 3**

4.22 The department should consider implementing a programme of strategically targeted audits of overseas manufacturing facilities and export pathways for plant-based stockfeed. These audits should focus attention and resources on identified areas of higher risk and ensure that compliance is further promoted.

**Department's response: Agree**

The department agrees with this recommendation. The Stockfeed Working Group will examine options to develop a targeted approach to audits of stockfeed facilities and import pathways using a risk-based model to better direct resourcing and intervention throughout the biosecurity continuum.

**Assessment of import permit applications**

4.23 The department's policy document *Guidelines on the policy for imported stockfeed of plant origin* (DAFF 2011a), desktop audits and on-site (overseas) audits are central to assessment of import applications and management of biosecurity risks.

4.24 Assessment of a stockfeed permit requires the importer (or manufacturer) to provide information about the commodity, its processing and storage. When the department receives a permit application, it ascertains whether the commodity is wholly manufactured and exported from the same facility or is to be moved to a second facility for export. The department also considers whether the application is from a manufacturer that has not previously exported the commodity to Australia or from an approved manufacturer seeking to renew a permit. Depending on the circumstances, the relevant questionnaire must be completed by the manufacturer:

- New manufacturer questionnaire—to be completed by manufacturing facilities that have not previously exported the product to Australia
- Off-site handler questionnaire—to be completed by a new facility and where the commodity is to be stored at a different location than where it was manufactured
- Existing manufacturing facility questionnaire—to be completed by a facility that has previously been audited and approved by the department
- Existing off-site handling facility questionnaire—to be completed by a facility that has previously been audited and approved by the department.

4.25 The [stockfeed questionnaire for manufacturers](#) is available at the department's website. This questionnaire is to be used for import of all types of stockfeed, stockfeed supplements, pet and fish food, and aquaculture feed.

4.26 Permit applications for import of stockfeed of plant origin (irrespective of a country's current animal pathogen risk status) are assessed solely by the department's Biosecurity Plant Division. The division first conducts a comprehensive risk assessment (Figure 1) that considers biosecurity risks associated with the commodity to be imported, the import pathway and the proposed end use of the stockfeed. The import permit application is then processed by the Plant Import Operations Branch (Biosecurity Plant Division). In approving specific manufacturing establishments overseas (Figure 1), the department ensures that biosecurity risks identified during desk and verification audits are satisfactorily addressed to meet Australia's appropriate level of protection.

- 4.27 All import applications are assessed on their compliance with Australia's import requirements, including the risks of introducing animal pathogens (particularly foot-and-mouth disease virus, infectious bursal disease virus and Newcastle disease virus) or plant pests of concern. The adequacy of heat-processing parameters for inactivation of these pathogens and pests and of measures to prevent post-processing contamination are of particular importance. The minimum heat treatment required for imported stockfeed is based on the production scale and type, and the country's animal health status. The minimum heat process is usually 80 °C for 10 minutes for low-risk countries and product with up to a minimum of 100 °C for 30 minutes (or equivalent) for high-risk product from high-risk countries (DAFF 2011a).
- 4.28 At any stage during assessment, the department's Plant Import Operations Branch can seek advice from the Biosecurity Animal Division to clarify any doubts or, for example, to ensure adequacy of supporting documents.
- 4.29 The department uses the Import Conditions (ICON) Permits database (an internal database) to process import permit applications. Each stage of the application process is recorded in the ICON Permits database. In 2013, 40 import permits were active for containerised and bulk import of various types of stockfeed of plant origin (Table 2).

**Table 2 Import permits for containerised and bulk import of stockfeed of plant origin, active in 2013**

Commodity	Containerised (loose or bagged)	Bulk (loose in ships' holds)
Soybean meal	5	7
Copra meal	16	0
Palm kernel expeller	5	2
Sugar beet pulp pellets	5	0

Source: Department of Agriculture, Canberra

- 4.30 The department adjusts and strengthens its import permit application assessment processes for stockfeed if consignments from particular exporting countries fail to comply with conditions listed on an import permit.
- 4.31 The department requires a separate application to be submitted for each stockfeed type; for example, soybean meal or sugar beet pulp flakes. However, if two types of similar products are produced at the same manufacturing establishment, both could be included on one application. A separate application must be submitted for importing a specific product from more than one country.
- 4.32 Import conditions are subject to change at the discretion of the Director of Quarantine, and an import permit can be revoked without notice.

## Information management

- 4.33 Major plant-based stockfeeds imported into Australia include: soybean meal, palm kernel meal, palm acid oil and molasses. Documents such as packing lists or invoices accompanying each imported stockfeed consignment must include import quantities for each consignment. Based on the respective tariff codes nominated by the importer/broker at the time of lodgement of each consignment, Customs 'flag' and refer those of biosecurity concern to the department. Biosecurity officers then ensure that the



consignment meets Australia's import requirements by checking the documents accompanying the consignment and by conducting physical inspections. Records provided by the department (2009 to 2013) suggest that volumes of these imported commodities did not show any particular trend. For example, between 2009 and 2011 the volume of soybean meal (Figure 5) increased from 476 841 to 539 075 metric tonnes; it then decreased to 466 823 metric tonnes in 2012, before peaking in 2013 at 590 568 metric tonnes. Similarly, no consistent increase in import volume was noted between 2009 and 2013 for other commodities such as palm kernel meal, palm acid oil and molasses.

- 4.34 The department only records quantities of plant-based stockfeed imported bulk in ships' holds. The import volume for stockfeed imported loose or bagged in containers is not available (for details, see paragraphs 4.35–4.39). The IIGB noted that the Australian Centre of Excellence for Risk Analysis (ACERA) undertook a study to determine the effect of border inspection outcomes on audit outcomes for plant-based stockfeed and the effect of the outcomes of audits on border inspection results. The ACERA report (ACERA 2013) noted:

The inspection outcomes could not be reliably linked to the audit data due to incomplete data capture at the border; the import permit number was commonly omitted or misrecorded. With the current data holdings, data capture policies, and offshore risk management strategies in place, connecting the outcomes of audits and border inspections in such a way that statistically reliable information can be obtained is a prohibitively cumbersome task.

The report concluded:

The information technology systems that DAFF [the department] uses to manage import and audit information are transactional, meaning that they focus on immediate processing and decision-making. Such systems are not designed to manage data in a way that makes the data readily available for post-hoc analysis. For example, even though all imports of PBS [plant-based stockfeed] must have a current import permit identified, the task of reliably identifying the imports that occurred under a particular permit number is extremely difficult.

- 4.35 The IIGB was advised that the use of free-text fields and comment lines for recording import permit details in the department's AIMS database, together with the lack of a specific tariff code for stockfeed of plant origin, makes it difficult to obtain reliable data for import quantities. For example, though all imports of stockfeed of plant origin must have a valid import permit, it is difficult to identify the various imports (consignments) that may have been imported under a particular permit number.
- 4.36 The department considers all imported stockfeed as a high-risk pathway because the commodity is fed directly to animals, usually on farms. Once each consignment is cleared at the border through document assessment and inspection, the product is released from quarantine. The department has no control over the product after it is deemed to have met Australia's import requirements and has been released from quarantine. The IIGB considers that, given the high potential risk and large volumes of stockfeed imported each year (Table 1), the department should ensure that import quantities are recorded. This would be consistent with the finding of the Beale report (Beale et al. 2008), which emphasised the need for strategic intelligence to underpin the risk-return approach to biosecurity:

Figure 5 Imported soybean meal stored at quarantine approved premises, Australia, 2014



Source: Interim Inspector-General of Biosecurity

Australia can only know which risk pathways and commodities are most threatening if it has collected and analysed relevant information. Good strategic intelligence on the animal and plant pest and disease status of neighbouring countries and trading partners is vital. This information ensures that biosecurity agencies can respond appropriately, including possibly modifying import requirements (Beale et al. 2008, p. 161).

- 4.37 Moreover, the department has not imposed requirements for recording data on the movement of imported consignments. Recording of such data would facilitate trace forward, traceback and recall of any particular batch of stockfeed and/or application of control measures for affected areas, should such actions be required. The need for recording volume data is crucial because the imported consignment stored at a QAP generally allows access to less than 1 per cent of the imported cargo, and it is likely that accessible product is not representative (ACERA 2013).
- 4.38 The IIGB noted that the incomplete or incorrect recording of import quantities of stockfeed consignments is not due solely to a lack of appropriate fields for recording inspection results in the AIMS database. Staff are also making errors, either by neglecting to use the correct 'free text fields' or 'comment lines' in AIMS or by not recording the import permit numbers in a consistent manner. For example, an import permit number consists of 10 alphanumeric characters, of which the first two are 'IP' (for 'import permit'). These are followed by two digits representing 'year', followed by numbers starting from 000001. Therefore, the *first* import permit issued in the year 2015 would have 'IP15000001' printed on all pages of the permit. If alpha numerals are not recorded consistently (as they appear on an import permit), it is difficult to mine data at a later stage. For example, if staff entered an underscore or a space between alphabets and numerals (say staff incorrectly recorded 'IP\_15000001' instead of 'IP15000001'), then a 'query' that used 'IP\_15000001' would exclude all records for items recorded as 'IP15000001'.
- 4.39 The department lacks a nationally consistent job card and training package to train staff to conduct border clearance and inspection activities on imported stockfeed consignments. The IIGB noted that a draft training package is being finalised and this is scheduled for release in the near future.

#### **Recommendation 4**

- 4.40 The department should (consistently across all ports) routinely record the import permit number, consignment description and inspection and testing outcomes (where applicable) of all bulk and bagged stockfeed consignments imported into Australia. These data should be available to relevant areas in the department to establish whether policy and regulation are effectively addressing biosecurity risks.

#### **Department's response: Agree**

The department agrees with this recommendation and will explore options for enhanced data recording and analysis.

## Processing of bulk in ships' holds entries

- 4.41 Currently, for containerised consignments, Compliance and Assessment Management System (CAMS) staff in the regions assess accompanying documents for completeness, including the packing list or invoices showing the volume of imported stockfeed. However, for bulk imports (in ships' holds), the importer/broker submits the documents electronically for assessment by the Bulk Commodities NCC staff at Newcastle. The Bulk Commodities NCC staff review the documents and corresponding import permit and then create a bulk vessel inspection schedule, which is emailed to CAMS staff in all regions. CAMS staff then enter all relevant information in AIMS and issue instructions to staff undertaking inspections of bulk in ships' hold consignments.
- 4.42 The IIGB suggests that for consistency and to ensure useful data capture and efficiency gains, information such as import volumes should be entered in the AIMS database by the staff assessing the documents that accompany each consignment. A more practical and convenient way to achieve this would be if entries for all bulk imports into Australia were processed at the Bulk Commodities NCC, Newcastle. The IIGB noted that the Bulk Commodities NCC has trained staff to undertake this task and it would be easier for them to process entries because they already prepare a bulk vessel inspection schedule for all bulk imports into Australia (which CAMS staff in the regions use to populate inspection directions). Another advantage of processing all entries at the Bulk Commodities NCC would be that importers/brokers would not have to present paperwork at two different locations—a matter of concern to these clients. The suggested arrangement would ensure a more efficient and consistent service delivery to the department's clients across the regions.

### Recommendation 5

- 4.43 The department should centrally process all entries for 'bulk in ships' holds' stockfeed imports at the Bulk Commodities National Coordination Centre, Newcastle.

**Department's response: Agree**

The department agrees with this recommendation.

## Adoption of National Appointment System

- 4.44 During fieldwork, the IIGB noted that regions have adopted the National Appointment System, which they are finding useful because it provides several benefits to both the department and industry. It provides a traceable record of bookings, together with a more streamlined booking process, allowing more efficient use of department staff and improved client service. In the near future the department plans to provide online booking functionality for clients, enabling administrative resources currently engaged in managing appointments manually to be redirected to other operational activities.

## Quarantine approved premises

- 4.45 All quarantine approved premises (QAPs) where imported stockfeed consignments are stored on landing are operated by third-party operators. They are regularly audited by department's auditors as per the [QAP class criteria requirements](#). The department audits

QAPs when required, including unannounced audits. All audits of QAPs are cost-recovered by the department. Outcomes of audits are recorded in a centrally managed Quarantine Premises Register (QPR), which is accessible to authorised department staff.

- 4.46 The IIGB searched the QPR for audit records to ascertain the level of compliance by the operators of Class 2.3 QAPs in the Melbourne region demonstrated satisfactory compliance against audit criteria, including meeting Class 2.3 criteria, conditions of approval, import permit(s), site assessment and documentation. Some examples of non-conformances recorded in the QPR include:
- poor lighting in the inspection and storage areas
  - floor of fumigation enclosure being impervious to fumigant
  - building/structure not maintained in a state of good repair or weatherproof
  - poor pest control measures/records
  - quarantine signs not permanently affixed where goods are stored, handled, treated or inspected
  - failure to inform the department of changes to contact person, QAP accredited person and/or contact details due to change in ownership.
- 4.47 The department issues notices in writing to QAP operators for corrective action(s) to be taken to address any identified non-conformity. Until the corrective action is taken, the premises cannot receive and store imported stockfeed. On receiving confirmation that the required corrective action has been completed, the department may audit the QAP again to ensure that the non-conformity has been addressed satisfactorily.

### **Testing for presence of animal-derived materials**

- 4.48 During fieldwork, the IIGB was informed that in recent years the required pre-border controls have been effectively applied by most overseas manufacturing establishments. As a consequence, inspectors are detecting significantly fewer instances of contamination in imported stockfeed consignments. This suggests that the department is effectively applying pre-border controls to contain identified biosecurity risks offshore.
- 4.49 Where an imported consignment requires real-time polymerase chain reaction (PCR) testing, it is listed on the import permit under condition PC0508. Entry management staff (CAMS) also insert a direction noting 'Testing—Biological testing' in AIMS for the biosecurity officer's attention. When the biosecurity officer inspecting the imported consignment determine that PCR testing is to be undertaken on a given consignment, they notify the central office (Plant Import Operations Branch, Biosecurity Plant Division) before a sample is collected.
- 4.50 For consignments subject to testing for the presence of materials of animal origin, a biosecurity officer takes a 500 gram sample from each consignment. This requires collection of 100 gram subsamples from five separate sites from the consignment. These subsamples are pooled into one sample bag and forwarded to the National Measurement Institute for analysis. All costs associated with transport and testing are borne by the importer. Mandatory sampling and testing intensity is determined on the basis of the following sliding scale:
- Every consignment for the first five consignments

then

- One in five consignments (on a random basis) until five consignments have been tested as negative

then

- One in twenty consignments (on a random basis).  
Requirements for mandatory sampling and testing intensity for stockfeed of plant origin are outlined in Appendix C.

4.51 If at any stage a consignment of the same commodity and from the same supplier tests positive, the sliding scale is implemented again from the beginning.

4.52 The National Measurement Institute uses an approved assay for PCR testing in accordance with the department's requirements, and provides copies of test results to both the department and importer. However, the [Animal Health Committee](#) has recommended a change in the testing method of imported plant-based stockfeed from routine PCR testing to microscopy, followed by confirmatory testing by PCR. The department will implement the modified testing procedure in the near future.

4.53 Consistent with the department's work instructions (AQIS 2006), staff in regional offices decide appropriate treatments for contaminated or infested consignments. This is based on the feasibility and practicality of performing an effective treatment. The department also determines, case-by-case, the remedial action for consignments found to contain ruminant DNA. In the last five years, only a small number of consignments has tested positive to DNA testing for ruminant material. The department requires that contaminated product is either re-exported or destroyed because there is currently no effective treatment.

#### **Recommendation 6**

4.54 The department should maintain ongoing testing for animal biosecurity risk material at an appropriate level and record results in a central register that is accessible to the department's policy and operational staff.

#### **Department's response: Agree**

The department agrees with this recommendation. The department is working to implement an updated testing methodology for Restricted Animal Material (RAM) in line with Animal Health Australia's recommendations.

#### **Information technology innovation**

4.55 Until 2014, after inspecting imported stockfeed consignments, biosecurity officers would record their observations and inspection outcomes in a notebook. They would then return to the office and enter this information into the central AIMS database. To avoid duplication of work for frontline staff and achieve greater efficiency, the department recently completed trialling mobile devices (tablets) as part of the national service delivery programme. The tablets are mobile workstations for staff undertaking inspections in the field, providing immediate access to emails and all electronic databases (for example, ICON, AIMS, ICS and QPR).

4.56 During fieldwork, the IIGB noted that staff participating in trials of tablets appeared to be more efficient and productive because the devices provided all relevant information about a particular consignment, allowed officers to make decisions on the spot (for example, at a QAP, wharf or importers' warehouse) about the consignment. Staff were able to move on to the next job without having to return to the office. The department developed training material and programmes for relevant staff before trialling the tablets. The department has started providing tablets to all biosecurity officers at the border. The IIGB commends the department for this initiative as; apart from productivity gains, it has advantages such as providing quick and nationally consistent service to its clients.

### **Job card and staff training package**

4.57 It is essential that all staff responsible for inspection of imported stockfeed consignments are fully competent to ensure that biosecurity risks are identified and addressed before a consignment is released from quarantine control. Before undertaking independent inspections of consignments imported in bulk in ships' holds, a less experienced or junior officer undergoes on-the-job training alongside an experienced inspector. After undertaking inspections as an assistant, officers are required to demonstrate an acceptable level of competence before independently performing onboard inspection activities.

4.58 Given the potentially high biosecurity risk presented by this commodity, the department should have a nationally consistent job card and staff training package. It was noted that a staff training package is being developed and this should be finalised for distribution in the next six months.

#### **Recommendation 7**

4.59 The department should finalise the job card and a staff training package for inspectors of imported stockfeed within the next six months. The training package should include a step-by-step procedure for recording (in the Department of Agriculture Import Management System, AIMS) details of each stockfeed consignment imported into Australia. These details should be available for analysis and policy development.

#### **Department's response: Agree**

The department agrees with this recommendation.

## Appendix A: Agency response



**Australian Government**  
**Department of Agriculture**

**ACTING SECRETARY**

Ref: EC15-000247

Dr Michael Bond  
Interim Inspector-General of biosecurity  
GPO Box 858  
CANBERRA ACT 2600

Dear Dr Bond *Mike*

Thank you for the opportunity to consider the audit report, *Effectiveness of biosecurity controls for import of stockfeed of plant origin*.

I believe that your reviews are an important part of the integrity of the management of the biosecurity system in Australia and your insights identifying improvement opportunities will help to further strengthen our system. Please find enclosed the department's response to each of the recommendations.

The department accepts the recommendations to further improve the quality of management and reduce the level of residual risk; and endorses the conclusion that the department is satisfactorily managing the biosecurity risks of imported plant stockfeed.

I do not believe that any of the information contained in the report could be considered as prejudicial to the public interest and should not be made publically available.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'P Glyde'.

Phillip Glyde

*22* May 2015

Enc. 1- Departmental Response to the Recommendations





**Australian Government**  
**Department of Agriculture**

ACTING SECRETARY

**ENCLOSURE 1**

**DEPARTMENTAL RESPONSE TO THE RECOMMENDATIONS**

The department considers that the audit report, *Effectiveness of biosecurity controls for import of stockfeed of plant origin*, provides a rational evaluation of the department's effectiveness in managing the biosecurity risks of the pathway.

The report emphasises that the department uses a suite of measures, both on- and off-shore as part of a systems approach to manage biosecurity risk associated with this pathway. Ensuring the safe importation of material which poses a biosecurity risk is a primary goal of the department. The department's role in risk management and regulation applies across all import pathways including – passengers, mail, air and sea cargo. Biosecurity risks are managed offshore, at the border, and within Australia—the biosecurity continuum—at the point where intervention is most effective.

**Response to recommendations:**

**Recommendation 1: Agree**

*The department should review and update its import risk analysis and/or policies for importing plant-based stockfeed into Australia.*

The department **agrees** with this recommendation.

**Recommendation 2: Agree**

*The department's Biosecurity Plant and Biosecurity Animal divisions should jointly undertake desk and verification audits of overseas stockfeed manufacturing establishments to facilitate more effective pre-border compliance and reduce the risk of both plant and animal disease incursions.*

The department **agrees** with this recommendation and has convened a working group (Stockfeed Working Group) composed of Biosecurity Plant and Animal division officers tasked with facilitating greater collaboration between the two areas in the management of the biosecurity risks associated with the plant-based stockfeed pathway.

**Recommendation 3: Agree**

*The department should consider implementing a programme of strategically targeted audits of overseas manufacturing facilities and export pathways for plant-based stockfeed. These audits should focus attention and resources on identified areas of higher risk and ensure that compliance is further promoted.*

The department **agrees** with this recommendation. The Stockfeed Working Group will examine options to develop a targeted approach to audits of stockfeed facilities and import pathways using a risk-based model to better direct resourcing and intervention throughout the biosecurity continuum.

**Recommendation 4: Agree**

*The department should (consistently across all ports) routinely record the import permit number, consignment description and inspection and testing outcomes (where applicable) of all bulk and bagged stockfeed consignments imported into Australia. These data should be available to relevant areas in the department to establish whether policy and regulation are effectively addressing biosecurity risks.*

The department **agrees** with this recommendation and will explore options for enhanced data recording and analysis.

**Recommendation 5: Agree.**

*The department should centrally process all entries for 'bulk in ships' holds' stockfeed imports at the Bulk Commodities National Coordination Centre, Newcastle.*

The department **agrees** with this recommendation.

**Recommendation 6: Agree**

*The department should maintain ongoing testing for animal biosecurity risk material at an appropriate level and record results in a central register that is accessible to the department's policy and operational staff.*

The department **agrees** with this recommendation. The department is working to implement an updated testing methodology for Restricted Animal Material (RAM) in line with Animal Health Australia's recommendations.

**Recommendation 7: Agree**

*The department should finalise the job card and a staff training package for inspectors of imported stockfeed within the next six months. The training package should include a step-by-step procedure for recording (in the Department of Agriculture Import Management System, AIMS) details of each stockfeed consignment imported into Australia. These details should be available for analysis and policy development.*

The department **agrees** with this recommendation.

## Appendix B: Approved stockfeed manufacturing facilities, 2015

**Table B1 Soybean meal, approved stockfeed manufacturing establishments, 2015**

Stockfeed manufacturing establishments	Country	First time audited	Last time audited
Establishment 1	Argentina	May 2008	May 2013
Establishment 2	Argentina	August 2013	August 2013
Establishment 3	Argentina	July 2007	August 2012
Establishment 4	Argentina	April 2007	August 2012
Establishment 5	China	August 2007	March 2013
Establishment 6	China	March 2013	March 2013
Establishment 7	China	March 2013	March 2013
Establishment 8	India	February 2012	February 2012
Establishment 9	United States	March 2012	March 2012
Establishment 10	United States	March 2012	March 2012
Establishment 11	United States	March 2012	March 2012
Establishment 12	United States	March 2012	March 2012

**Table B2 Palm kernel expeller, approved stockfeed manufacturing establishments, 2015**

Stockfeed manufacturing establishments	Country	First time audited	Last time audited
Establishment 1	Malaysia	November 2006	May 2013
Establishment 2	Malaysia	June 2007	September 2012
Establishment 3	Solomon Islands	December 2011	October 2013
Establishment 4	Papua New Guinea	April 2010	September 2012

**Table B3 Sugar beet pulp pellets, approved stockfeed manufacturing establishments, 2015**

Stockfeed manufacturing establishments	Country	First time audited	Last time audited
Establishment 1	The Netherlands	September 2010	September 2010
Establishment 2	United Kingdom	December 2005	October 2012
Establishment 3	Chile	August 2012	June 2013
Establishment 4	Chile	June 2013	June 2013
Establishment 5	Chile	June 2013	June 2013

**Table B4 Copra meal, approved stockfeed manufacturing establishments, 2015**

Stockfeed manufacturing establishments	Country	First time audited	Last time audited
Establishment 1	Philippines	October 2012	October 2012
Establishment 2	Philippines	June 2007	December 2011
Establishment 3	Vanuatu	September 2011	October 2013
Establishment 4	Solomon Islands	December 2011	October 2013

---

<b>Stockfeed manufacturing establishments</b>	<b>Country</b>	<b>First time audited</b>	<b>Last time audited</b>
Establishment 5	Solomon Islands	October 2013	October 2013
Establishment 6	Solomon Islands	December 2011	October 2013
Establishment 7	Samoa	April 2013	April 2013
Establishment 8	Kiribati	July 2010	September 2012
Establishment 9	Indonesia	January 2005	October 2012
Establishment 10	Papua New Guinea	April 2010	September 2012
Establishment 11	Papua New Guinea	April 2010	September 2012
Establishment 12	Papua New Guinea	February 2014	February 2014

---

Source: Department of Agriculture, Canberra

## Appendix C: Analytical testing for the presence of animal-derived materials

These testing procedures are adapted from the Department of Agriculture's Import Conditions Database (ICON).

1. The department requires analytical testing for the presence of animal-derived materials in any of the following cases:
  - a) the product is a prepared multi-ingredient stockfeed or stockfeed base or premix from any source country  
or
  - b) the product contains fish meal other than:
    - fish meal made from whole fish and produced in a dedicated plant that does not process or store other stockfeed ingredients  
or
    - fish meal prepared as a by-product of fish processing and which has been produced in a dedicated plant that does not process or store other stockfeed ingredients  
or
    - prepared fish feed packaged and labelled for aquarium or hatchery use in packs no greater than 16 kilograms per individually packaged unit  
or
    - unprocessed fish for use as bait or aquaculture feed  
or
  - c) the product is transported in bulk and the cleanliness of containers or the ship's hold before export cannot be guaranteed to the satisfaction of the Department of Agriculture (for example, through a pre-approved arrangement)  
or
  - d) the product is transported in bulk but at inspection on arrival, the cleanliness of containers/holds is not confirmed and there is a risk of contamination with animal derived materials  
or
  - e) the product is packaged but is packed in other than in new and unused bags  
or
  - f) at inspection on arrival, the integrity of packaging is found to be deficient.

Note: Certain approved products may intentionally include ingredients of ruminant origin. Examples are feeds from New Zealand for use in poultry/pig rations or feeds from New Zealand that include dairy products such as colostrum. In cases where such ingredients would give a positive result to the test, the test will not be required.
2. Consignments subject to testing will be determined on the basis of the following sliding scale:
  - Every consignment for the first five consignments then

- 
- One in five consignments (on a random basis) until five consignments have been tested as negative  
then
  - One in twenty consignments (on a random basis).
3. If at any stage a consignment tests positive, the sliding scale will be implemented again from the beginning.
  4. For consignments subject to testing for the presence of materials of animal origin, a biosecurity officer is to take a 500 gram sample from each consignment. The sampling requires collection of 100 gram subsamples from five separate sites from the consignment that is being inspected. These subsamples are to be pooled into one sample bag. This sample is to be forwarded by the biosecurity officer for analysis to the National Measurement Institute and the sample is to remain under Department of Agriculture control until collected by the courier. All costs associated with transport and testing are borne by the importer.
  5. Bagged and containerised product must be directed to one of the following quarantine approved premises (QAP) for sampling:
    - a) Category 1 QAP (1.1; or 1.2; or 1.3) operated by a third-party provider (not the importer or buyer)
    - or
    - b) Class 2.3 QAP inspected on a daily basis by a biosecurity officer at the importer's expense.The consignment must remain at the QAP until the Department of Agriculture has received confirmation that samples are ready for collection.
  6. Bulk consignments in a ship's hold must be discharged for sampling to a Class 2.3 QAP, and be inspected daily by a biosecurity officer at the importer's expense. Release from the QAP will be approved on a consignment-by-consignment basis on receipt of a declaration from the National Measurement Institute stating that test results have shown that the batch is free of ruminant DNA.

## Glossary

<b>Term</b>	<b>Definition</b>
AIMS	Department of Agriculture Import Management System
audit	Systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which criteria are fulfilled; includes a desk assessment of documentary material and, where necessary, on-site verification through an examination of the systems in place
biosecurity	The management of risks to the economy, the environment, and the community, of pests and diseases entering, emerging, establishing or spreading
biosecurity officer	Formerly known as quarantine officer; a person appointed under the <i>Quarantine Act 1908</i> who has functions and/or powers of a quarantine officer
CAMS	Compliance and Assessment Management System, managed by the Department of Agriculture
competent authority	Official service or authority established by the government of an exporting state, which has the responsibility and competence for ensuring or supervising implementation of animal, plant or public health standards
consignment	Total quantity of imported stockfeed arriving at the same time in one or more lots, nominated on a single quarantine entry covered by each phytosanitary certificate
ICON	Import Conditions Database, managed by the Department of Agriculture
ICS	Integrated Cargo System, managed by the Australian Customs and Border Protection Service
import permit	In relation to goods, a permit granted by the Director of Quarantine (or delegate) to import prohibited goods into Australia
import risk analysis	Process that enables the Australian Government to formally consider risks that could be associated with proposals to

Term	Definition
	import new products into Australia; import risk analyses are conducted by the Department of Agriculture
inspection	Examination of products or systems for the biosecurity of animal, plant, food and human health to verify that they conform to Australian Government requirements
OIE	World Organisation for Animal Health
OSS	The Department of Agriculture’s Operational Science Support network helps identify suspect plant pests and diseases found in incoming consignments of imported goods
PCR	polymerase chain reaction (PCR)
pest	Any species, strain or biotype of the kingdoms Animalia (excluding human beings), Plantae, Fungi, Monera or Protista that has negatively affected or poses a likely threat of having an effect on other organisms
pre-border controls	Pre-border activities seek to prevent biosecurity risks reaching Australia’s border; these activities include cooperation in multilateral forums, import risk analyses, intelligence gathering and quarantine and audit activities
quarantine	System of measures used to manage risks of entry and establishment of pests or diseases that threaten animal, plant or human health
QAP	A quarantine approved premises is a place approved, under section 46A of the <i>Quarantine Act 1908</i> , as a place where goods of a specified class that are subject to quarantine may be treated or otherwise dealt with
QPR	The Quarantine Premises Register (QPR) is a register of places approved for the performance of quarantine-related activities
risk assessment	Evaluation of the likelihood and the biological and economic consequences of entry, establishment or spread of a pest or disease within the territory of an importing country
risk management	Process of identifying, selecting and implementing measures that can be applied to reduce the level of risk



<b>Term</b>	<b>Definition</b>
standard operating procedures	Document that outlines procedures for conducting significant operational activities, taking into account management of risk, legislation and workplace health and safety requirements
verification	Confirmation through provision of objective evidence that specified requirements have been fulfilled; includes inspection and audit activities
work instruction	A succinct easy-to-understand document that complements a standard operating procedure and provides definitive guidance for performing specific operational tasks

## References

ACERA 2013, *Determination of effect of audits on pathway contamination rates for medium-risk stockfeed*, report no. 1001B Study J, Australian Centre of Excellence for Risk Analysis, Melbourne, available at [cebra.unimelb.edu.au/publications/acera\\_reports/risk\\_return](http://cebra.unimelb.edu.au/publications/acera_reports/risk_return).

AFFA 2003, *Importation of stockfeed and stockfeed ingredients—finalised risk management measures for transmissible spongiform encephalopathies (TSEs)*, Department of Agriculture, Fisheries and Forestry Australia, Canberra, available at [agriculture.gov.au/biosecurity/risk-analysis/reviews/final-animal/stockfeed-ingredients](http://agriculture.gov.au/biosecurity/risk-analysis/reviews/final-animal/stockfeed-ingredients).

AQIS 2006, *Inspection procedures for imported bulk, containerised and bagged stockfeed (of plant origin) consignments*, Department of Agriculture, Fisheries and Forestry, Canberra. Unpublished.

AQIS 1999, *Importation of heat processed stockfeed of plant origin*, Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forestry—Australia, available at [agriculture.gov.au/biosecurity/risk-analysis/ira/final-animal/stockfeed](http://agriculture.gov.au/biosecurity/risk-analysis/ira/final-animal/stockfeed).

Beale, R, Fairbrother, J, Inglis, A & Trebeck, D 2008, *One biosecurity: a working partnership, Commonwealth of Australia*, Canberra, available at [agriculture.gov.au/about/publications/quarantine-biosecurity-report-and-preliminary-response](http://agriculture.gov.au/about/publications/quarantine-biosecurity-report-and-preliminary-response).

DAFF 2013a, *Instruction and guideline: movement protocol for live/viable quarantinable material for OSP analysis*, Department of Agriculture, Fisheries and Forestry, Canberra. Unpublished.

DAFF 2013b, 'New sampling procedures for imported bulk commodities (Level 2 and 3 fertiliser and stockfeed)', Notice to industry 06/2013, Department of Agriculture, Fisheries and Forestry, Canberra, January, available at [agriculture.gov.au/import/industry-advice/ian/13/06-2013](http://agriculture.gov.au/import/industry-advice/ian/13/06-2013).

DAFF 2011a, *Guidelines on the policy for imported stockfeed of plant origin*, Department of Agriculture, Fisheries and Forestry, Canberra. Unpublished.

DAFF 2011b, *Import risk analysis handbook 2011*, Department of Agriculture, Fisheries and Forestry, Canberra, available at [agriculture.gov.au/biosecurity/risk-analysis/ira/process-handbook](http://agriculture.gov.au/biosecurity/risk-analysis/ira/process-handbook).