# Live veterinary vaccines

## Summary of information required for biosecurity risk assessment

Department of Agriculture, Fisheries and Forestry

# SUMMARY OF INFORMATION REQUIRED FOR THE BIOSECURITY RISK ASSESSMENT OF LIVE VETERINARY VACCINES

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| **Document Version Control History** | | | |
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| 1 | 13 October 2011 | N/A | N/A |
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| 9 | 8 May 2023 | | • Update name of department to 'Department of Agriculture, Fisheries, Forestry'.<br>• Update department contact email address. |

# A. Introduction

This Summary of Information (SOI) document is to be used by applicants who wish to apply for an Import Permit for live or novel veterinary vaccines. The document not only outlines the information required to assess these applications but also provides a reference as to how the information is to be presented to the Department of Agriculture, Fisheries and Forestry.

The department assesses Import Permit applications for live and novel veterinary vaccines according to the requirements of the following policies:

- Australian Quarantine Policy and Requirements for the Importation of Live and Novel Veterinary Bulk and Finished Vaccines, November 1999;
- Specific Quarantine Requirements for the Importation of Inactivated Veterinary Vaccines (an addendum to the guidelines for submissions to import veterinary vaccines), December 1997; and
- 'Guidelines for managing the risk of transmitting transmissible spongiform encephalopathies (TSEs) via veterinary vaccines and other in vivo veterinary products, October 2012'.

Applicants will notice that under each section of the SOI there is a heading **'Guidance on Policy Requirements'**. The points under this heading are a useful summary of the relevant policy requirements. **The points are for guidance only.** Applicants who require clarification on specific points of policy must refer to the relevant policy document or contact the department using imports@agriculture.gov.au.

Applicants will also notice the heading **'Evidentiary Requirements'** under each section of the SOI. The department's assessing officers are required to review documents as the principal means of verifying compliance with relevant vaccine policy requirements. Those documents outlined under 'Evidentiary Requirements' must be presented by the applicant in support of their Import Permit application.

The department may impose requirements in addition to those specified in this SOI where applicants/manufacturers have not demonstrated an appropriate level of control of biosecurity risk during the veterinary vaccine manufacturing process. Examples of additional requirements include pathogen testing of vaccine intermediates/final product, increased documentation requirements or on-site audit requirements.

# B. Dossier format

The department requires supporting documentation to be presented in a format that will maximise the efficiency of the assessment process. All supporting documentation must be provided in a dossier specific for the department's assessment which is supplementary to this SOI. Dossiers may be in electronic or hard copy format. The department will not accept dossiers that have been prepared for other regulatory agencies as supporting information for an Import Permit application.

Dossiers presented to the department must be annotated in a way that allows easy reference between the SOI and the dossier. The department requires information in dossiers to be indexed in the following way:

**Index**
**Preliminary Information Requirements**

**1. Standards of Manufacture/Sourcing of Ingredients**

**2. Master Seed Viruses (MSV)**

**3. Master Seed Bacteria (MSB)**

**4. Master and Working Cell Seeds**

**5. Working and Production Seeds – Viral and/or Bacterial**

**6. Nutritive factors**

**7. Trypsin and other enzymes of animal origin**

**8. Fermentation broths and culture media**

**9. Components of avian origin and embryonated eggs**

**10. Other materials of animal origin**

**11. Final Product – Viral Vaccines**

**12. Final Product – Bacterial Vaccines**
**Applicant's Declaration**

Applicants must provide documentation according to the **Evidentiary Requirements** outlined in each section of this SOI. For example, where the SOI requires applicants to provide a copy of a current certificate demonstrating compliance of the manufacturing facility with a code of Good Manufacturing Practice (GMP) a copy of this certificate must be included in the **'1. Standards of Manufacture/Sourcing of Ingredients'** section of the dossier.

It is appreciated that not all sections of the dossier will be relevant to every vaccine product (e.g. vaccines are not always manufactured using nutritive factors derived from serum). Where this is the case, manufacturers must provide a declaration within the relevant section of the dossier confirming the absence of the component in vaccine manufacture.

Import Permit applications for new vaccine products that are submitted without a correctly formatted dossier will be rejected with no refund of application or assessment fee.

# C. Equivalence

Australia is a signatory to the World Trade Organisation's Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). Under the SPS Agreement, the department is authorised to develop science-based policies and impose measures that prevent the introduction of diseases and pests. It is also an obligation under the SPS Agreement that the department considers risk management measures that might be equivalent to current policy requirements.

This obligation extends to the department's veterinary vaccine assessments. Applicants may present a case for equivalence to the department where a particular vaccine is not compliant with Australia's import requirements but the applicant believes that biosecurity risks are managed through alternative, equivalent means. Cases for equivalence may be presented as an appendix to the dossier submitted in support of the Import Permit application.

The department will review the case for equivalence and consider whether advice from Animal Biosecurity (AB) branch or an external agency (e.g. an external government laboratory) is necessary for a complete assessment of the case. AB is the principal source of scientific/technical policy advice to assessing officers however it may be necessary for advice to be sought from other entities.

Once all relevant information relating to the case for equivalence has been collated and reviewed by the department, including advice from AB, a decision will be made as to whether the measures outlined in the case provide a level of biosecurity risk control that is equivalent to current policy requirements.

Where it is determined that the case does not provide an equivalent level of biosecurity risk control the department will not issue an Import Permit for the vaccine.

In preparing a case for equivalence it is important to remember that the department adopts a tiered approach to risk management and that risk controls should be applied at the point at which the risk is created. The implication of this approach is that biosecurity risk control steps for one stage of the manufacturing process may not be considered effective in mitigating the biosecurity risk for another stage. For example, the biosecurity risk of a master seed that has not undergone extraneous agent testing as required by the policy may not be mitigated by the chemical inactivation step of the final bulk vaccine antigen.

Import Permit applications for non-compliant vaccine products that are not accompanied by a considered and well drafted case for equivalence relating to the areas of non-compliance will be rejected with no refund of application or assessment fees.

# D. Preliminary Information Requirements

## 1. Table for applicant to complete

### Table 1 Product information

| | |
|---|---|
| **Name of vaccine** | |
| **Target species** | |
| **List all antigens in final product** | |
| **Active against** | |
| **Manufacturer** | |
| **Importer** | |
| **List the name of the dossiers submitted in support of the application** | |

## 2. Complete list of biological materials

Biological materials are those derived from animals, plants and/or a microbial fermentation process. A complete list of biological materials used in vaccine manufacture must be provided in Table 2. This list defines the scope of the biosecurity risk assessment.

### Table 2 List of all biological components used during vaccine production

| |
|---|
| **Name and reference code for all master seed organisms/viruses:** |
| **Name and reference code for all working and production seed organisms/viruses:** |
| **Name and reference code for all master and working cell seeds:** |
| **Complete list of biological products used during production:** |

## 3. Flowchart of Production

Manufacturers must provide a Flowchart of Production outlining each major step of the production process. The Flowchart of Production must make specific reference to each biological component used in manufacture at the point at which that biological component is used in manufacture.

## 4. Registration and volumes of sale of vaccine in other countries

The department will not permit the importation of live conventional viral and bacterial vaccines unless the vaccine has a well-established safety record. A well-established safety record is defined as 'use in a significantly large number of animals in a country or countries with appropriate veterinary services, diagnostic capabilities and adverse reaction reporting mechanisms'. The department requires applicants to provide a table outlining the list of countries that have registered the vaccine product for distribution and general use in their animal health industries. The department also requests that the table include figures on the volumes of sale for the vaccine product in each country.

Applicants must also provide a summary of records of reported adverse reactions to the vaccine and subsequent investigations.

## 5. Assessment of Risk for Hazardous Genetic Recombination and Re-assortment of Imported Veterinary Vaccines and Master Seeds

The importation and use of veterinary vaccines may create biosecurity risks associated with genetic recombination or re-assortment between vaccine strains and other strains already circulating in Australia. Recombination/reassortment events may have a significant influence on factors of biosecurity concern associated with strains that are progeny of parent strains.

Novel vaccines that include replication deficient but not incompetent nucleic acid may also pose risks of recombination or re-assortment.

To help facilitate the importation of veterinary vaccines (and master seeds) into Australia a decision tree was developed – *Decision Tree for Assessing the Risk of Hazardous Genomic Recombination or Re-assortment in Veterinary Vaccines*. Applicants must provide a response to the relevant decision tree questions below as part of a complete application. Where the decision tree directs applicants to undertake a 'detailed risk assessment' further supporting information will be required[1]:

| # | Question | Response |
|---|---|---|
| **1** | Does the vaccine replicate any part of its nucleic acid in host cells after inoculation? | **Yes** – Proceed to question 2.<br>**No** – Vaccine does not present a risk. Risk assessment concludes here. |
| **2** | Does the vaccine contain genetic information derived from multiple strains of the same virus or bacterial species? | **Yes** – Detailed risk assessment required. Proceed to question 3.<br>**No** – Proceed to question 3. |
| **3** | Does the parental virus or bacterial species from which the nucleic acid is derived occur in Australia? For vectored vaccines, both the host and any donor organism(s) must be considered. | **Yes** – Proceed to question 5.<br>**No** – Proceed to question 4. |
| **4** | Are there viral or bacterial species in the Australian environment sufficiently similar to the parental virus or bacterial species from which the genetic information was derived such that recombination or re-assortment is likely? For vectored vaccines, both the host and the donor organism must be considered. | **Yes** – Detailed risk assessment required. Proceed to question 6.<br>**No** – Unlikely to pose genetic recombination/re-assortment risk. Proceed to question 14. |
| **5** | Is all the genetic material in the vaccine strain or, for a vectored vaccine, are both the insert and the vector, derived entirely from an Australian isolate of the virus or bacterial species? | **Yes** – Unlikely to pose genetic recombination/re-assortment risk. Proceed to question 19.<br>**No** – Proceed to question 6. |
| **6** | Is the virus family or bacterial genus (or family) of the vaccine strain, vector or any infectious agent from which the nucleic acid inserted within the vector was derived, known to recombine, re-assort or horizontally transfer autonomous genetic elements in the field or | **Yes** – Proceed to question 8.<br>**No** – Proceed to question 7. |

[1] Guidance on the information required for a 'detailed risk assessment' can be found in the department's 'Assessment of Risk for Hazardous Genetic Recombination and Re-assortment of Imported Veterinary Vaccines and Master Seeds' document.

| | | |
|---|---|---|
| | could be expected to contain plasmids, genetic elements, recombine, re-assort or transfer genetic material horizontally in the field? | |
| **7** | Is there specific evidence that the viral or bacterial species of the vaccine strain, vector or nucleic acid insert within the vector, DOES NOT recombine with other vaccines or with the wild-type agent or include autonomous genetic elements? | **Yes** - Unlikely to pose genetic recombination/re-assortment risk. Risk assessment concludes here.<br>**No** – Proceed to question 8. |
| **8** | Is the parental strain of the vaccine or vector strain, or the strain from which any of the nucleic acid in the vaccine was derived, considered to have factors of animal biosecurity significance which represent increased risk over the same species in Australia? | **Yes** – There is the potential for vaccine to introduce genes/mutations that do not occur in Australia. Proceed to question 9.<br>**No** – Proceed to question 11. |
| **9** | Is the basis for the increased biosecurity risks of the parental strain understood? | **Yes** – Proceed to question 10.<br>**No** – Detailed risk assessment required. Proceed to question 14. |
| **10** | Are all the genes known to be responsible for biosecurity concern in any parental strains deleted from the vaccine strain, or the vector and the insert? | **Yes** – Proceed to question 19.<br>**No** – Detailed risk assessment required. Proceed to question 14. |
| **11** | Are there any genes or mutations that are known to increase factors of biosecurity concern in this virus or bacterial species? | **Yes** – Proceed to question 12.<br>**No** – Proceed to question 14. |
| **12** | Are these genes or mutations present within the vaccine strain, vector or insert within the vector? | **Yes** – Proceed to question 13.<br>**No** – Proceed to question 14. |
| **13** | Do these genes or mutations occur in circulating viruses, bacteria, or live attenuated vaccines already in use in Australia? | **Yes** – Proceed to question 14.<br>**No** – Unacceptable risk. Risk assessment concludes here. |
| **14** | Does the vaccine formulation contain any known autonomous genetic elements (including plasmids, viral (sub-) genomes, or segmented viral elements)? | **Yes** – [Bacterial autonomous genetic element (AGE)] Proceed to question 15.<br>[Viral AGE] Proceed to question 18.<br>**No** - Unlikely to pose genetic recombination/re-assortment risk. Proceed to question 19. |
| **15** | Are the autonomous genetic elements transmissible to other bacteria or to the host? | **Yes** – Proceed to question 16.<br>**No** – Proceed to question 19. |
| **16** | Is the host range of the autonomous genetic element restricted to the same bacterial species as the vaccine? | **Yes** – Detailed risk assessment required. Proceed to question 19.<br>**No** – Vaccine may present significant risk. Proceed to question 17. |
| **17** | Does the autonomous genetic element contain genes or mutations known to influence factors of biosecurity concern in this pathogen or other pathogens that do not occur in Australian pathogens? | **Yes** – Unacceptable risk. Risk assessment concludes here.<br>**No** – Detailed risk assessment required. |

| | | |
|---|---|---|
| | | Proceed to question 19. |
| **18** | Is the viral nucleic acid that has been introduced into the vaccine able to generate infectious virus? | **Yes** - Unacceptable risk. Risk assessment concludes here.<br>**No** – Detailed risk assessment required. Proceed to question 19. |
| **19** | Does the vaccine strain contain any known antimicrobial or disinfectant resistance genes? | **Yes** – Detailed risk assessment required.<br>**No** - Unlikely to pose genetic recombination/re-assortment risk. Risk assessment concludes here. |

When the decision tree concludes that a detailed risk assessment is required, the applicant will need to provide the necessary data and scientific evidence to the department. Applicants should consider seeking formal advice from an independent expert (external to the company) with relevant expertise. Applicants should contact the department to confirm the suitability of the independent expert.

The department will take into consideration advice provided by the independent external expert during its assessment of the level of recombination or re-assortment risk. After assessing all the available information, the department will determine whether the likelihood and consequences of any possible recombination or re-assortment event are sufficiently low to support the application to import the vaccine or master seed.

## 6. Additional Notes to Applicants

- The department will conduct a process of public consultation for live vaccines including live vector vaccines that are considered to have a significant impact on the agricultural industry and/or the environment or have a high risk of reversion to virulence or genetic reassortment. As part of the public consultation process the department may convene an expert working group to review public comment and provide expert advice on biosecurity issues associated with an application.

- An auditor with appropriate expertise in biosecurity risk assessment will audit, on a full cost recovery basis, the manufacturing facility, process and documentation prior to the initial approval of a live vaccine. For live viral vaccines, physical audits will be conducted every 4 years or more frequently if considered appropriate by the Director of Biosecurity.

- The department will issue import permits for live viral vaccines on a batch-by-batch basis only. However, if the assessment confirms that an exporting company has implemented appropriate controls to ensure that the source of raw ingredients and processing of batches would remain unchanged the department may permit the importation of multiple batches of vaccine under a single permit.

# E. Information Requirements

## 1. Standards of Manufacture/Sourcing of Ingredients

### 1.1 Guidance on Policy Requirements

- The manufacturing facility must comply with an appropriate code of Good Manufacturing Practice (GMP). This is to ensure principles of quality assurance are built into every step of production (e.g. final product quality, traceability of raw materials, appropriate records management practices).

- The department will assess the principles of quality assurance adopted by the manufacturing facility to ensure they operate in accordance with Australia's import requirements (i.e. the control of biosecurity risk).

- The manufacturing facility must be subjected to regular audit and must be approved for manufacture of veterinary vaccines by the relevant government competent authority.

- If the facility holds other pathogens or manufactures vaccines against other pathogens, the vaccine must be tested and shown to be free of these pathogens or the manufacturer must, by other means, satisfy the department that cross-contamination has not occurred.

- All sterilisation procedures must be validated and verified for the specific product, container type, configuration and volume and must be supported by GMP standards and procedures.

- All materials of animal origin used in the production process must be sourced from countries with high standards of animal health and veterinary services.

- The source of all materials of animal origin used during production must be certified. This certification must be issued by the government of the source country. Manufacturer's certification may be accepted as an alternative to government certification for low-risk products (i.e. those that will be effectively sterilised prior to use). Manufacturer's certification may also be accepted for other substrates except nutritive factors (e.g. serum) and animal enzymes (e.g. trypsin) provided the manufacturer is operating under a quality assurance system accepted by the department as adequate to ensure compliance with Australian biosecurity requirements.

- The department will not permit the importation of live vaccines that were produced using primary cell cultures unless the cultures were derived from specific pathogen free (SPF) animals. A SPF herd or flock must meet European Pharmacopoeia (Ph. Eur.) requirements or other requirements specified by the department.

- The department's list of "Pathogens of highest animal biosecurity concern" (formerly referred to as the Annex 1 list) can be accessed at https://www.agriculture.gov.au/sites/default/files/documents/pathogens-of-highest-biosecurity-concern.pdf. This list includes pathogens exotic to Australia which pose such a major economic and social threat to this country that sourcing of potentially contaminated products from affected countries will not be considered unless the product is effectively sterilised. In addition to country freedom, testing of certain products for pathogens included on this list may be required especially where documentation concerning origin is unsatisfactory.

- The department's list of "Transmissible spongiform encephalopathies" (formerly referred to as the Annex 2 list) can be accessed at https://www.agriculture.gov.au/sites/default/files/documents/transmissible-spongiform-encephalopathies.pdf. This list contains prion diseases [e.g. scrapie and bovine spongiform encephalopathy (BSE)]. These agents are difficult to detect and generally extremely resistant to inactivation. Vaccines produced using products sourced from the relevant species in affected countries will not be approved.

- The department's list of "Pathogens of major animal biosecurity concern" (formerly referred to as the Annex 3 list) can be accessed https://www.agriculture.gov.au/sites/default/files/documents/pathogens-of-major-animal-biosecurity-concern.pdf. This list includes other animal diseases which are either other exotic pathogens, potentially exotic strains of an endemic pathogen or are potential contaminants of economic and social concern to Australia. The department may also identify other potential contaminants of concern during the risk assessment.
- The department will not approve the importation of vaccines manufactured in facilities that store or handle infectious agents included on the department's list of "Pathogens of highest animal biosecurity concern" or other agents of biosecurity significance to Australia.
- The department will not permit the importation of avian vaccine if the facility in which it is produced holds or uses avian influenza virus (virulent strains), Newcastle disease virus (virulent strains) or highly virulent strains of Infectious Bursal Disease virus.

## 1.2 Evidentiary Requirements

Manufacturers must provide:

**1.2.1** A copy of the current GMP certificate for their facility.

**1.2.2** A copy of the registration/approval document issued to the facility by the government competent authority in the country of vaccine manufacture.

**1.2.3** A complete list of microorganisms and viruses held at the facility.
NB. The manufacturing facility includes all buildings on site including production buildings, QC, and R&D areas.

**1.2.4** A case in the form of a written declaration or procedural document demonstrating how the vaccine product is protected from contamination with microorganisms/viruses held at the manufacturing facility. Manufacturers must also provide a site floor plan in support of their case.

**1.2.5** A description of all activities undertaken on the same site as the vaccine manufacturing plant e.g. vaccine research involving challenge trials, veterinary pathology and diagnostic services.

**1.2.6** A description of all activities undertaken on neighbouring sites e.g. intensive livestock production, abattoirs, animal research facilities.

**1.2.7** A complete list of products manufactured at the facility.

**1.2.8** A complete list of current Standard Operating Procedures in use within the manufacturing facility.

**1.2.9** Evidence that all sterilisation procedures have been validated and verified for the specific vaccine product, container type, configuration and volume and must be supported by GMP standards and procedures. A copy of the Standard Operating Procedure outlining the sterilisation validation process is an example of the evidentiary requirement which may be submitted to the department to demonstrate compliance with the policy requirement.

**1.2.10** Assessing officers will conduct a documentation traceback audit of the vaccine manufacturing process to verify that the quality management system supports effective traceability. Manufacturers must be able to demonstrate a document control system that allows the department to review all relevant batch production records for a batch of

vaccine that was recently manufactured and released for distribution. The paper trail must include, but not be limited to, the following documents:

- The batch specific Certificate of Analysis for a batch of vaccine recently manufactured and released for distribution.
- Copies of reports for tests undertaken on the final vaccine product (or bulk inactivated antigen prior to filling).
- Copies of the manufacturing facility's raw material specifications for all biological products used during manufacturing.
- Copies of Certificates of Analysis for specific batches of animal derived product used to manufacture the vaccine batch.
- Copies of in-process batch control records (e.g. thermocouple data for autoclave sterilisers).

Manufacturers must provide copies of the complete document audit trail in the '1. Standards of Manufacture/Sourcing of Ingredients' section in the supporting dossier.

# 2. Master seed viruses (MSVs)

## 2.1 Guidance on Policy Requirements

- All MSVs must be tested for:
  - bacterial and fungal contamination as per the United States Code of Federal Regulations, Title 9 (9CFR) 113.27(c) or Ph. Eur. 2.6.1; and
  - mycoplasmas as per 9CFR 113.28 or Ph. Eur. 2.6.7; and
  - extraneous viruses as per 9CFR 113.55 and 113.300; or as per Ph. Eur. - Vaccines for Veterinary Use 0062; and
  - Pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" and "Pathogens of major animal biosecurity concern" (see 1.1) which are pathogenic to the species[2]
    -- from which the virus was originally isolated
    -- from which all cell lines used for propagation and maintenance since original isolation of the virus were derived
    -- from which all nutritive factors of animal origin previously used with these cell lines were derived
    -- for which the vaccine is intended; and
    -- any other pathogen determined during assessment of the application to be a potential contaminant.

- The strain/serotype/genotype of master seed virus used must be either endemic in Australia or a recognised attenuated or naturally apathogenic strain considered safe for release in Australia.

- MSVs derived from bovine, ovine or caprine animals (or other species considered susceptible to TSEs) will be assessed according to the requirements of the TSE policy (see Introduction). Applicant should refer to the TSE policy for further information.

## 2.2 Evidentiary Requirements for MSVs

**2.2.1** Manufacturers must provide a full and well documented history of the master seed (in prose and tabulated form). The history must include the species of origin, country of origin, date of isolation and passage history. The history must also identify all cell lines and nutritive media used for the transport, storage and propagation of the MSV.

Template for submission of tabulated MSV history

The department requires applicants to use Table 3 as a template for submission of the MSV history:

### Table 2 Template for submission of tabulated MSV history

| Seed designation | Passage | Biological raw materials | | Comments |
|---|---|---|---|---|
| | | Material | Lot numbers | |
| Original isolate | X – ? | | | |

[2] Note: Assessing officers take into consideration countries of origin and potential for contamination before and after any processing or treatments.

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| Pre-MSV | X - 1 | | | |
| MSV | X | | | |

A completed table must include specific details of all biological raw material (e.g. nutritive factors) and cell lines used during establishment of the MSV.

**2.2.2** Manufacturers must also provide copies of test reports for all general and specific extraneous agent tests performed on the MSV. The reports must:

- be specific for the designated MSV that will be used to manufacture vaccine for the Australian market; and

- outline the protocol which was used to test for each extraneous pathogen.

**2.2.3** Manufacturers must also provide scientific literature which has been subject to peer review which demonstrates that the MSV is endemic in Australia or is a recognised attenuated or naturally apathogenic strain considered safe for release in Australia.

**2.2.4** Manufacturers must also provide copies of reversion to virulence, purity and identity confirmation studies.

# 3. Master seed bacteria (MSB)

## 3.1 Guidance on Policy Requirements

- All MSB must be tested for:
  - Identity and purity such that the MSB is shown to contain only the species and strain of bacterium stated; and
  - All pathogens included on the department's list of "Pathogens of highest animal biosecurity concern" and bacterial pathogens included on the department's list of "Pathogens of major animal biosecurity concern" which occur in the country of origin of, and are pathogenic to or carried by the species:
    -- from which the MSB was originally isolated; and
    -- from which all culture media ingredients of animal origin used since original isolation of the bacteria were derived unless effectively sterilised prior to use; and
    -- any other pathogen determined during assessment of the application to be a potential contaminant.

- MSB derived from bovine, ovine or caprine animals (or other species considered susceptible to TSEs) will be assessed according to the requirements of the TSE policy (see Introduction). Applicant should refer to the TSE policy for further information.

## 3.2 Evidentiary Requirements for MSB

**3.2.1** Manufacturers must provide a full and well documented history of the master seed (in prose and tabulated form). The history must include the species of origin, country of origin, date of isolation and passage history. The history must also identify all culture media used for transport, storage and propagation of the bacteria.

Template for submission of tabulated form of MSB history

The department requires applicants to use Table 4 as a template for submission of the MSB history:

### Table 3 Template for submission of tabulated form of MSB history

| Seed designation | Passage | Biological raw materials | | Comments |
|---|---|---|---|---|
| | | Material | Lot numbers | |
| Original isolate | X – ? | | | |
| | | | | |
| | | | | |
| | | | | |
| Pre-MSB | X - 1 | | | |
| MSB | X | | | |

A completed table must include specific details of all biological raw material (e.g. growth media) used during establishment of the MSB.

**3.2.2** Manufacturers must also provide copies of test reports for all general and specific extraneous pathogen tests, and non-pathogen related testing (e.g. purity and identity confirmation), performed on the MSB. The reports must:

- Be specific for the designated MSB that will be used to manufacture vaccine for the Australian market; and

- Outline the protocol for each test.

# 4. Master and Working Cell Seeds

## 4.1 Guidance on Policy Requirements

- The department will only accept the use of primary cell cultures if they have been derived from specific pathogen free (SPF) herds or flocks.
- The country of origin of the cell line must have been free of major exotic pathogens included on the department's list of "Pathogens of highest animal biosecurity concern" for the relevant species of origin at the time of creation of the cell line.
- If of ovine or caprine origin, the country of origin must not be scrapie affected at the time of or within the 6-year period after the creation of the cell line.
- If of bovine origin, the country of origin must not be BSE affected at the time of or within the 6-year period after the creation of the cell line.
- The department requires master and working cell seeds to be tested in accordance with the requirements of the Ph. Eur. Chapter 5.2.4 *(Cell cultures for the production of veterinary vaccines).*
- The department requires master and working cell seeds to undergo karyological and identity testing.
- All master cell seeds must be tested for:
  - Bacterial and fungal contamination as per 9CFR 113.26 or Ph. Eur. 2.6.1; and
  - Mycoplasmas as per 9CFR 113.28 or Ph. Eur. 2.6.7; and
  - Extraneous pathogens as per 9CFR 113.51 for primary cell lines or as per 9CFR 113.52 for master and production (working) cell lines; and
  - Extraneous pathogens as per Ph. Eur. - Vaccines for Veterinary Use 0062 and 5.2.4; and
  - Bluetongue virus and pestivirus; and
  - All other pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" and "Pathogens of major animal biosecurity concern" which are pathogenic to or carried by the species:
    -- From which the cell line was originally isolated;
    -- Of all nutritive factors of animal origin previously used on the cell line since its creation unless the nutritive factor was effectively sterilised;
    -- For which the vaccine is intended.

  Testing of the master and working cell seeds must be completed as described below:

| | MCS | WCS | cells from WCS at highest passage level |
|---|---|---|---|
| general microscopy | + | + | + |
| bacteria/fungi | + | + | - |
| mycoplasma | + | + | - |
| viruses | + | + | - |
| identification of species | + | - | + |
| karyology | + | - | + |

Testing should be carried out on a culture of the MCS, WCS or on cells from the WCS at the highest passage level used for production and derived from a homogenous representative sample.

## 4.2 Evidentiary Requirements for Master and Working Cell Seeds

**4.2.1** Manufacturers must provide a full and well documented history of the master and working cell seed (in prose and tabulated form). The history must include the species of origin, country of origin, date of creation and passage history. The history must also identify all nutritive factors used during creation of the seeds.

Template for tabulated form of master and working cell seed history

The department requires applicants to use Table 5 as a template for submission of the seed history:

### Table 4 Template for tabulated form of master and working cell seed history

| **Seed designation** | **Passage** | **Biological raw materials** | | **Comments** |
|---|---|---|---|---|
| | | **Material** | **Lot numbers** | |
| Original cellular extract | X – ? | | | |
| | | | | |
| | | | | |
| | | | | |
| Pre-master cell seed (MCS) | X - 1 | | | |
| MCS | X | | | |

| | | | | |
|---|---|---|---|---|
| Working cell seed | X + ? | | | |

A completed table must include specific details of all biological raw material (e.g. nutritive factors) used during creation of the seeds.

**4.2.2** Manufacturers must also provide copies of test reports for all general and specific extraneous agent tests, and all non-pathogen related testing (e.g. identity and karyology) performed on the MCS and WCS. The test reports for the MCS must be specific for the designated MCS that will be used to manufacture vaccine for the Australian market. The test reports for the WCS must be specific for the designated WCS currently being used in the manufacturing facility to manufacture vaccine. All test reports must outline the protocol for each test.

# 5. Working and Production seeds (viral or bacterial)

## 5.1 Guidance on Policy Requirements

- All working and production viruses and bacteria must be tested for potential pathogens as per relevant 9CFR or Ph. Eur. requirement or as determined by the department on assessment of the application.

## 5.2 Evidentiary Requirements for Working and Production seeds (viral and bacterial)

**5.2.1** Manufacturers must provide a copy of the Standard Operating Procedure, or equivalent quality system document, outlining the testing undertaken on all working/production seeds used in vaccine manufacture. If not referenced in the Standard Operating Procedure, the manufacturer must provide a declaration attesting to the specific standard against which the working/production seed has been tested (e.g. 9CFR or Ph. Eur.).

# F. Information Requirements for Production Process

## 6. Nutritive factors e.g. blood, serum, foetal serum, serum albumins, serum products

### 6.1 Guidance on Policy Requirements

- The country and species of origin of all nutritive factors must be government certified.
- The country of origin must be free of major exotic pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" relevant to the species of origin.
- Nutritive factors derived from bovine, ovine or caprine animals (or other species considered susceptible to TSEs) will be assessed according to the requirements of the TSE policy (see Introduction).
- Nutritive factors must be tested for:
    - Bacterial and fungal contamination as per 9CFR 113.26 or Ph. Eur. 2.6.1; and
    - Mycoplasmas as per 9CFR 113.28 or Ph. Eur. 2.6.7; and
    - Other extraneous pathogens as per 9CFR 113.53 or Ph. Eur. 0062; and
    - Pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" and "Pathogens of major animal biosecurity concern" which are pathogenic to the species of origin of the nutritive factor; and
    - Bluetongue virus if derived from bovine, ovine, or caprine animals or other susceptible species (regardless of country of origin); and
    - Pestivirus
    - Any other pathogen determined during assessment of the application to be a potential contaminant.

### 6.2 Evidentiary Requirements

**6.2.1** Manufacturers must provide a copy of the government certificate for all nutritive factors used in vaccine manufacture. Government certificates must be for a batch of nutritive factor recently used in manufacture and must attest to the country and species of origin.

**6.2.2** Manufacturers must also provide a copy of their raw material specification (RMS) or equivalent quality system document for all nutritive factors used in vaccine manufacture. The RMS document must outline all testing and/or treatment undertaken prior to use.

**6.2.3** Manufacturers must also provide a copy of the supplier's Certificate of Analysis or equivalent quality system document for all nutritive factors used in manufacture. The CofA must be specific to a batch recently used in manufacture and must outline any testing and/or treatment undertaken by the supplier.

Please note: Applicants may satisfy the requirements of **6.2.1 – 6.2.3** as part of the documentation traceback audit requirements of **1.2.11**.

# 7. Trypsin and other enzymes of animal origin

## 7.1 Guidance on Policy Requirements

- The country and species of origin of all animal enzymes must be government certified.
- The country of origin must be free of the major exotic pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" relevant to the species of origin unless the product will be effectively sterilised prior to use.
- Animal enzymes derived from bovine, ovine or caprine animals (or other species considered susceptible to TSEs) will be assessed according to the requirements of the TSE policy (see Introduction).
- Animal derived enzymes must be tested for:
  - Bacterial and fungal sterility as per 9CFR 113.26 or Ph. Eur. 2.6.1; and
  - Mycoplasmas as per 9CFR 113.28 or Ph. Eur. 2.6.7; and
  - Other extraneous pathogens as per 9CFR 113.53 or Ph. Eur. 5.2.5; and
  - If of porcine origin
    a) porcine parvovirus;
    b) porcine pestivirus (CSF);
    c) porcine reproductive and respiratory syndrome (PRRS) virus;
    d) transmissible gastroenteritis (TGE) virus; and
    e) Aujeszky's disease (pseudorabies) virus.

*Note: Testing for PRRS, TGE and Aujeszky's disease virus is not required if the country of origin of the animals from which the product was derived AND the country of production of the enzyme are free of the respective virus.*

  - If of bovine origin
    a) bovine parvovirus;
    b) bovine pestivirus (BVD);
    c) vesicular stomatitis virus (VSV); and
    d) infectious rhinotracheitis virus.

*Note: Testing for VSV and IBR virus is not required if the country of origin of the animals from which the product was derived AND the country of production of the enzyme are free of the respective virus.*

  - Any other pathogen determined during assessment of the application to be a potential contaminant.

## 7.2 Evidentiary Requirements

**7.2.1** Manufacturers must provide a copy of the government certificate for all enzymes of animal origin used in vaccine manufacture. Government certificates must be for a batch of enzymes recently used in manufacture and must attest to the country and species of origin.

**7.2.2** Manufacturers must also provide a copy of their raw material specification (RMS) or equivalent quality system document for all enzymes of animal origin used in vaccine manufacture. The RMS document must outline all testing and/or treatment undertaken on each batch prior to use.

**7.2.3** Manufacturers must also provide a copy of the supplier's Certificate of Analysis (CofA) or equivalent quality system document for all enzymes of animal origin used in manufacture. The CofA must be specific to a batch recently used in manufacture and must outline any testing and/or treatment undertaken by the supplier.

Please note: Applicants may satisfy the requirements of **7.2.1 – 7.2.3** as part of the documentation traceback audit requirements of **1.2.11**.

# 8. Fermentation broths and culture media

## 8.1 Guidance on Policy Requirements

- All ingredients used in the fermentation broth/production culture media must be provided for assessment. The country and species of origin of each ingredient of animal origin must be specified along with details of any processing, treatments or testing of either the ingredients or final culture media/fermentation broth.

- Unless effectively sterilised (refer to 2.3.3 in policy) prior to use, meat extracts must not be sourced from countries affected by diseases included on the department's lists of "Pathogens of highest animal biosecurity concern" for the relevant species of origin. Additional testing will also be required for the relevant "pathogens of highest animal biosecurity concern" if sourced from such countries.

- Animal ingredients derived from bovine, ovine or caprine animals (or other species considered susceptible to TSEs) will be assessed according to the requirements of the TSE policy (see Introduction).

- Unless effectively sterilised prior to use, either the individual ingredient of animal origin or the final fermentation broth/culture media must be tested for:
  - Bacterial and fungal contamination as per 9CFR 113.26 or Ph. Eur. 2.6.1; and
  - Mycoplasmas as per 9CFR 113.28 or Ph. Eur. 2.6.7; and
  - Extraneous pathogens as per 9CFR 113.53 or Ph. Eur. 5.2.5; and
  - Pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" and "Pathogens of major animal biosecurity concern" which are pathogenic to the species of origin of any fermentation/culture ingredients of animal origin; and
  - Any other pathogens determined during assessment to be a potential contaminant.

## 8.2 Evidentiary Requirements

**8.2.1** Manufacturers must provide a copy of their raw material specification (RMS) or equivalent quality system document for all fermentation broths/culture media used in vaccine manufacture. The RMS document must outline all testing and/or treatment undertaken on each batch prior to use.

**8.2.2** Manufacturers must also provide a copy of the supplier's Certificate of Analysis (CofA) or equivalent quality system document for all fermentation broths/culture media used in manufacture. The CofA must be specific to a batch recently used in manufacture and must outline:

- The country and species of origin of each ingredient of animal origin used in manufacture of the product; and

- Any processing/treatments undertaken on the ingredients of animal origin or final culture medium/fermentation broth product; and

- All tests undertaken on the individual ingredients of animal origin or final culture medium/fermentation broth product.

Please note: Applicants may satisfy the requirements of **8.2.1 – 8.2.2** as part of the documentation traceback audit requirements of **1.2.11**.

# 9. Components of avian origin and embryonated eggs

## 9.1 Guidance on Policy Requirements

- Embryonated eggs, avian cell lines and other components of avian origin used for production of live vaccines, which are not effectively sterilised, must be derived from specific pathogen free (SPF) flocks. SPF flocks must be under veterinary supervision and approved by the relevant government authority in the country of origin. Vaccination of the SPF flock against any disease including Newcastle disease or avian influenza must not be practiced.

- The principles, procedures and testing regime for SPF flocks must be as described in Ph. Eur. Chapter 5.2.2 (Chicken flocks free from specified pathogens for the production and quality control of vaccines). Flocks must also be tested for other avian pathogens included on the department's list of "pathogens of major animal biosecurity concern".

- Avian cell lines and other components/ingredients of avian origin must be sampled and tested for extraneous avian pathogens listed in Ph. Eur. Chapter 5.2.2 and included on the department's list of "pathogens of major animal biosecurity concern".

- Avian cell lines and components of avian origin (unless effectively sterilised) must also be tested for bacteria, fungi, mycoplasma, salmonella and adventitious viruses as per 9CFR 113.26, 113.28, 113.30, 113.31, 113.34.

- Components of avian origin and eggs must be tested for any other pathogens determined during assessment of the application to be a potential contaminant.

## 9.2 Evidentiary Requirements

**9.2.1** When SPF eggs or avian cell lines derived from SPF eggs are used in manufacture, manufacturers must provide:

- A copy of the government health certificate demonstrating approval of the SPF flock by the competent authority in the country of origin.

- A copy of the government health certificate or equivalent government endorsed quality system document demonstrating current test results of the SPF flock testing program (Ph. Eur. Chapter 5.2.2 and "pathogens of major animal biosecurity concern").

**9.2.2** When components of avian origin which have undergone effective sterilisation are used in manufacture, manufacturers must provide:

- A copy of their raw material specification (RMS) or equivalent quality system document for the components of avian origin used in vaccine manufacture. The RMS document must outline the country and species of origin and all testing/treatments undertaken; and

- A copy of the supplier's Certificate of Analysis (CofA) or equivalent quality system document for all components of avian origin used in manufacture. The CofA must be specific to a batch recently used in manufacture and must outline the country and species of origin and all testing/treatments undertaken by the supplier.

Please note: Applicants may satisfy the requirements of **9.2.1 – 9.2.2** as part of the documentation traceback audit requirements of **1.2.11.**

# 10. Other materials of animal origin

## 10.1 Guidance on Policy Requirements

- The country and species of origin, processing and any pathogen testing must be detailed with the application. Appropriate government health certification and other documentation providing an audit trail should be provided.
- Materials of animal origin must not be sourced from countries affected by diseases included on the department's lists of "Pathogens of highest animal biosecurity concern" for the relevant species of origin unless effectively sterilised.
- Animal ingredients derived from bovine, ovine or caprine animals (or other species considered susceptible to TSEs) will be assessed according to the requirements of the TSE policy (see Introduction).
- All other materials of animal origin must be either effectively sterilised or be tested for:

  - Bacterial and fungal contamination as per 9CFR 113.26 or Ph. Eur. 2.6.1; and

  - Mycoplasmas as per 9CFR 113.28 or Ph. Eur. 2.6.7; and

  - Extraneous pathogens as per 9CFR 113.53 or Ph. Eur. 5.2.5; and

  - Pathogens included on the department's lists of "Pathogens of highest animal biosecurity concern" and "Pathogens of major animal biosecurity concern" which are pathogenic to the species of origin of the material of animal origin; and

  - Any other pathogen determined during assessment of the application to be a potential contaminant.

## 10.2 Evidentiary Requirements

**10.2.1** Manufacturers must provide either:

- A copy of the government certificate for all animal materials used during manufacturing. The certificate must be for a batch recently used and must attest to the country and species of origin of each material of animal origin; or
- A copy of the Certificate of Analysis (CofA) or equivalent quality system document for all animal materials during manufacturing. The document must be specific to a batch recently used in manufacture and must attest to the country and species of origin of each material of animal origin.

Applicants should refer to the '1. Standards of Manufacture/Sourcing of Ingredients' section of the SOI for direction as to whether a government certificate or CofA is required for other materials of animal origin.

**10.2.2** Manufacturers must also provide a copy of their raw material specification (RMS) or equivalent quality system document for all animal origin ingredients used in vaccine manufacture. The RMS document must outline all testing and/or treatment undertaken on each batch.

**10.2.3** Manufacturers must also provide a copy of the supplier's Certificate of Analysis (CofA) or equivalent quality system document for all animal origin ingredients used in manufacture. The CofA must be specific to a batch recently used in manufacture and must outline any testing/treatments undertaken.

Please note: Applicants may satisfy the requirements of **10.2.1 – 10.2.3** as part of the documentation traceback audit requirements of **1.2.11.**

# 11. Final Product – Viral Vaccines

## 11.1 Guidance on Policy Requirements

- Every batch of the final bulk (or final container) viral vaccine must be sampled and tested in general in accordance with either 9CFR 113.200 or Ph. Eur. 0062.

- Every batch of the final bulk (or final container) viral vaccine must be sampled and tested for bacterial and fungal sterility as per 9CFR 113.26 or Ph. Eur. 2.6.1.

- Every batch of the final bulk (or final container) viral vaccine must be sampled and tested for freedom from mycoplasma as per 113.28 or as per Ph. Eur. 2.6.7.

- Every batch of the final bulk (or final container) viral vaccine must be sampled and tested for freedom from other extraneous pathogens by the following:

  - as per the Ph. Eur. monograph for the specific live viral vaccine; or

  - inoculation of vaccine, which is neutralised by monospecific antiserum, onto an appropriate range of cell lines known to be sensitive to viruses pathogenic to the target species and testing for cytopathic agents, inclusion bodies and haemadsorbing agents; or

  - by any other method determined appropriate by the department.

- In addition, every batch of the final bulk (or final container) live avian viral vaccine must be sampled and tested for freedom from the following:
  - Avian leucosis viruses as per either Ph. Eur. 2.6.4 or 9CFR 113.31; and
  - Extraneous viruses using cell cultures as per Ph. Eur. 2.6.5 or 9CFR 113.34; and
  - Extraneous viruses using fertilised eggs as per Ph. Eur. 2.6.3 or 9CFR 113.34; and
  - Extraneous agents using chicks as per Ph. Eur. 2.6.6 or 9CFR 113.36 (only if the 9CFR test uses serology to detect antibodies to the pathogens listed in Ph. Eur. 2.6.3); and
  - Salmonella as per either 9CFR 113.30 or other method determined appropriate by the department.

- Additional testing may be necessary as determined during assessment of the application.

- If deemed as necessary by the department, prior to release from quarantine, each batch of live viral vaccine may be tested at the Australian Centre for Disease Preparedness (ACDP) or another laboratory approved by the department for any relevant pathogen included on the department's list of "pathogens of highest animal biosecurity concern" and any other pathogen considered to be a potential contaminant of biosecurity concern. Testing may be required on each batch or only the initial imported batch.

## 11.2 Evidentiary Requirements for Viral Vaccines

**11.2.1** Manufacturers must provide a copy of the Certificate of Analysis, or equivalent quality system document, for batches of final viral vaccine product. The document must demonstrate compliance with the above testing requirements.

**11.2.2** Manufacturers must also provide a copy of a test report for a batch of vaccine that was recently manufactured and released by the manufacturer's Quality Assurance team.

Please note: Applicants may satisfy the requirements of **11.2.1 – 11.2.2** as part of the documentation traceback audit requirements of **1.2.11**.

# 12. Final Product – Bacterial Vaccines

## 12.1 Guidance on Policy Requirements

- Every batch of the live final bulk (or final container) bacterial vaccine must be sampled and tested in general in accordance with either 9CFR 113.64 or Ph. Eur. 0062.
- Every batch of the live final bulk (or final container) bacterial vaccine must be sampled and tested for bacterial and fungal sterility as per 9CFR 113.27 or Ph. Eur. 2.6.1.
- If the media used for vaccine production supports the growth of mycoplasma, every batch of the live final bulk (or final container) bacterial vaccine must be sampled and tested for freedom from mycoplasma as per 9CFR 113.28 or Ph. Eur. 2.6.7.
- Additional testing may be necessary as determined during assessment of the application.
- If deemed necessary by the department, prior to release from biosecurity control, each batch of live bacterial vaccine may be tested at the Australian Centre for Disease Preparedness (ACDP) or another laboratory approved by the department for any relevant pathogen included on the department's list of "pathogens of highest animal biosecurity concern" or any other pathogen considered to be a potential contaminant of biosecurity concern. Testing may be required on each batch or only the initial imported batch.

## 12.2 Evidentiary Requirements for Bacterial Vaccines

**12.2.1** Manufacturers must provide a copy of the Certificate of Analysis, or equivalent quality system document, for batches of final product. The document must demonstrate compliance with the above testing requirements.

**12.2.2** Manufacturers must also provide a copy of a test report for a batch of vaccine that was recently manufactured and released by the manufacturer's Quality Assurance team.

Please note: Applicants may satisfy the requirements of **12.2.1 – 12.2.2** as part of the documentation traceback audit requirements of **1.2.11**.

# G. Applicant Declaration

I declare that the information provided in this document and in supporting dossiers is accurate and that the Department of Agriculture, Fisheries and Forestry will be advised of any changes to the production process that affect the content of these documents.

I authorise the exchange of information relating to the vaccine product outlined in this Summary of Information document between agencies within the department, including the Australian Pesticides and Veterinary Medicines Authority (APVMA). I understand that this information will be used by the agencies for the purpose of ensuring compliance of the vaccine product with the regulatory requirements of each agency.

| | |
|---|---|
| **Signature:** | |
| **Name:** | |
| **Date:** | |
| **Position:** | |
| **Company name and address:** | |

# Appendix 1 – Definitions

**'Effective sterilisation' -** means treating in such a way as to completely inactivate all conventional adventitious agents including viruses. Examples of effective sterilisation are autoclaving at 121°C for 15 minutes, 50 kGy gamma irradiation or any other treatment which has been demonstrated to achieve a 6-log reduction in titre for all potential contaminants.

Additional points for consideration:

- Prions proteins are also a potential contaminant of concern for the department. Prion proteins are highly resistant to treatment and the department relies upon country freedom for the relevant species of origin.
- A level of titre reduction higher than 6 log will be required where there is reasonable likelihood of contamination e.g. if the average level of contamination in a product is 2 logs, treatment must achieve at least an 8 log (i.e. 6+2) reduction in titre.
- All sterilisation procedures should be validated, verified for the product, container type, configuration and volume and be supported by GMP standards and procedures. For example, in the case of autoclaving of culture media and other substrates, the autoclaving conditions should be validated for each media, for each container type and for each autoclave load configuration.

- **'Government certificate' –** a document issued by the government agency/competent authority responsible for certification of agricultural products in the country of origin. International requirements for government certification are outlined on the website of the World Organisation for Animal Health (www.oie.int). Further to the overarching international requirements for government-to-government certification the department requires the certificate to meet the following:
  - the certificate must have been issued and dated within the last 6 months; and
  - the certificate must be sealed with the stamp/seal of the issuing national competent authority.

- **'Manufacturer's declaration' –** a document issued by the manufacturer containing a written declaration as per the requirement outlined in the SOI. Manufacturer's declarations must be on manufacturer's letterhead and must be signed by a suitable member of the manufacturer's quality assurance/control team and dated within the last 6 months.

# Appendix 2 – Further information on testing to detect extraneous agents in master seeds/raw materials

A critical aspect of the biosecurity risk assessment for Import Permit applications for vaccine products is the review of extraneous agent testing in master seeds (master seed viruses, master seed bacteria, master cell seeds) and raw materials used in manufacture. It is a policy requirement that master seeds/raw materials undergo testing to demonstrate, to an appropriate level of confidence, that they are free from extraneous agents.

In March 2013, Animal Biosecurity Branch (ABB) published the document 'Review of Published Tests to Detect Pathogens in Veterinary Vaccines Intended for Importation into Australia (Second Edition)'. This Review document provides clarification on the tests that are considered acceptable for extraneous pathogen testing of master seeds and raw materials for use in vaccine manufacture.

The department acknowledges that there may be other validated unpublished test methods that are equally reliable and sensitive, including some test methods that remain commercial-in-confidence and are unpublished. These will be assessed by the department on case-by-case basis with input from ABB and may lead to an update of the Review document.

Applicants may view the document at https://www.agriculture.gov.au/biosecurity/risk-analysis/animal/review-of-published-tests-to-detect-pathogens/ba2013-05-review-tests-to-detect-pathogens.

How does the department use this document during the assessment of my Import Permit application?

This document is used as the principal reference for determining whether testing (general or specific) is suitable for the purposes of detecting extraneous agents in master seeds or raw materials used in manufacture of vaccines for the Australian market.

**Prior to submission of the vaccine Import Permit application** applicants must ensure that the test reports for master seeds/raw materials submitted to the department in support of the application clearly outline the test method used for each test. In addition applicants should review the list of test methods currently accepted by the department to determine whether additional testing of master seeds/raw materials will be required.

The department will accept a test demonstrating freedom of the master seed/raw material which has been conducted in accordance with the requirements of the Review document. Where the document indicates that the test method is unsuitable for detection of extraneous agents the department will require additional testing to be undertaken in accordance with the requirements of the Review document. Applications which are submitted for vaccine manufactured using master seeds/raw materials that have been tested using methods deemed unsuitable will be rejected.

Where the master seed/raw material has been tested using a method not referenced on the Review document the assessing officer will consult with ABB on the suitability of the method for detection of extraneous agents.

# Privacy notice

Personal information means any information or opinion about an identified, or reasonably identifiable, individual. Personal information that is collected under or in accordance with the *Biosecurity Act 2015* is also 'protected information' under the Biosecurity Act.

The Department of Agriculture, Fisheries and Forestry is authorised under the Biosecurity Act to collect your personal information for the purposes of determining import conditions for your live veterinary vaccine product and for other related purposes. If you fail to provide some or all of the relevant personal information requested in this form, the department may be unable to process the import permit application that relates to this form.

Information collected by the department will only be used or disclosed under the Biosecurity Act. The department may disclose your personal information to the Department of Health and the Australian Pesticides and Veterinary Medicines Authority, and other Australian Government agencies, persons or organisations where necessary for these purposes. It will not usually be disclosed overseas. It will only be disclosed if authorised under the Biosecurity Act.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint. Alternatively, telephone the department on +61 2 6272 3933 (or +61 3 8318 6700 outside Australia).