Construction of a new post-entry quarantine facility at Mickleham, Victoria

3.1 The Department of Agriculture, Fisheries and Forestry (DAFF) and Department of Finance and Deregulation (DoFD) propose to construct a new post-entry quarantine (PEQ) facility at Mickleham, Victoria. Both agencies acted as proponent agencies for this inquiry.

3.2 The purpose of the project is to replace five existing facilities in four states that have reached the end of their useful life. The new facility will consolidate all the existing functions on a single site.

3.3 The cost of the project is $293.1 million.

3.4 The project was referred to the Committee on 7 February 2013.

Conduct of the inquiry

3.5 Following referral to the Committee, the inquiry was advertised on the Committee’s website, by media release and in the Hume Leader and Hume Weekly newspapers.

3.6 The Committee received one submission and seven supplementary submissions from the proponent agencies. The Committee also received submissions from various organisations and individuals. The list of submissions can be found at Appendix A.

3.7 The Committee received a private briefing and conducted a site inspection, a public hearing and an in-camera hearing on 27 March 2013 in Melbourne.

3.8 A transcript of the public hearing and the submissions to the inquiry are available on the Committee’s website.¹

¹ <www.aph.gov.au/pwc>
Need for the works

3.9 DAFF currently leases and operates five PEQ facilities in Australia for imported live animals and plants. These leases are due to expire between 2015 and 2018 and are not able to be renewed for the medium to long term. The expiry of the current leases means that DAFF must develop an alternative facility for the future PEQ services. The present leases include:

- Eastern Creek, Sydney, Australia’s largest Commonwealth operated post entry quarantine station (dogs, cats, bees, horses, ruminants and plant material)
- Knoxfield, east of Melbourne (plant material)
- Spotswood, inner Melbourne (dogs, cats, ruminants and live birds)
- Torrens Island, near Adelaide (fertile avian eggs)
- Byford, south-west of Perth: (cats and dogs).

3.10 The dispersed nature of current operations across the country is a historical legacy of the development of sites delivering these functions over a long period of time. This is also reflected in the fact that sites are generally specialised to the delivery of single, or a limited number of, import species.

3.11 The existing facilities at each of the five sites are over 25 years old and have reached the end of their useful life. Maintenance and refurbishment has been undertaken since 2012 to sustain the existing facilities to ensure they meet required biosecurity, quarantine, occupational health and safety, and animal welfare standards while new facilities are constructed.²

3.12 The Committee is satisfied that there is a need for the works.

Scope of the works

3.13 The works will include the following facilities:

- administration facilities
- car parking for staff and visitors
- cat and dog compounds suitable for 240 cats and 400 dogs
- plant compound of some 2,000m² of greenhouse capacity distributed over multiple separate greenhouses, a further four shade houses totalling some 1,200 square metres, and a plant diagnostic laboratory
- avian compound with separate facilities for live bird and fertile egg imports. The two live bird facilities will hold some 150 live pigeons

² DAFF/DoFD, Submission 1, pp. 7-8.
each, while the fertile egg facilities will be capable of holding up to 11,500 fertile chicken eggs

- bee compound including six flight rooms
- ruminant compound including open paddocks for animals such as alpacas
- two horse compounds including stables for 80 horses.

3.14 The works will be delivered in two stages:

- Stage 1: Commence operation of the quarantine facilities for plants, horses and bees together with the administrative and general facilities and approximately 50 per cent of cat (120 cats) and dog (200 dogs) quarantine facilities by October 2015.

- Stage 2: Commence operation of the remaining cat (total 240 cats) and dog (total 400 dogs) facilities, ruminants and the avian facilities by October 2018.

3.15 Subject to Parliamentary approval, construction for Stage 1 is planned to commence in late 2013 and be completed by October 2015. Construction for stage 2 is planned to commence in July 2016 and be completed by October 2018.

3.16 The Committee finds that the proposed scope of works is suitable to meet the need.

**Cost of the works**

3.17 The project cost is $293.1 million. The Committee received a confidential supplementary submission detailing the project costs and held an in-camera hearing with the proponent agencies on these costs.

3.18 The Committee is satisfied that the costings for the project provided to it have been adequately assessed by the proponent agencies.

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3 DAFF/DoFD, Submission 1, pp. 9-10.
5 DAFF/DoFD, Submission 1, p. 21.
Project issues

A single, consolidated facility

3.19 The proponent agencies stated that a single, consolidated facility was the best option for the project, as it provides operational and biosecurity efficiencies:

… operating one facility has a focus of precisely that: one facility. Managing five in five separate locations requires five administrations, five sets of security management and five sets of operating practices. Over time and separated by many thousands of kilometres in some cases, some of these practices have drifted apart from each other. What we are keen to do is to manage all of the facility to one high standard, so that is actually where we are taking this. That is not to say that biosecurity is in any way compromised currently. It is just that we believe we will gain greater efficiencies, greater economies of scale and greater cost effectiveness by being in one facility.6

3.20 Regarding concerns about having multiple species in a single location, two of the existing facilities have multiple species on the one site.7 Further, various engineering and biosecurity redundancies will be built into the proposed site:

… we have separated the individual facilities on this large site by many metres—in some cases, hundreds of metres—and that is part of the biosecurity separation exercise; there is physical separation within that construct … Horses are provided for in biosecurity by two facilities separated in distance. The cross contamination of species disease spread is very rare and has not been recorded here in Australia in all the years we have been operating. In that sense, there is no reason that in the event that, even if in one of those facilities in the same building envelope in the avian facility there was a problem, the others would be necessarily affected. If it is a horse problem we have another horse facility. Horse facilities are treated as individual entities, not unlike the avian facilities. For example, all the horses going into one facility are all in there together. They do not come out except together. So we have redundancies within the site; we have separation of different

6 Dr C. Grant, DAFF, transcript of evidence, 27 March 2013, p. 3.
7 Dr C. Grant, DAFF, transcript of evidence, 27 March 2013, p. 3.
elements of the facility between species; and we have separation of units within the species. It is a nested environment, if you will.  

3.21 The proponent agencies confirmed that the site will be independently certified to ensure that it meets all standard requirements, before it commences operation.

Committee comment

3.22 The Committee is satisfied that the proponent agencies will ensure that the facility meets all relevant biosecurity standards prior to commencing operation.

Co-location of avian facilities (live birds and fertile eggs)

3.23 Significant concerns were raised by the avian industry regarding the co-location of live birds and fertile eggs in the same building. The key concern was that the proposal had insufficient isolation between units in the avian facility, thus enabling cross-contamination and compromising biosecurity.

3.24 The proponent agencies clarified that although the avian facility would be a single building, it would contain five separate units:

- The avian building is designed to provide effective biological separation between consignments of birds of different origin and health status. Five separate units will be built and maintained at a negative pressure of QC3 [Quarantine Containment Level 3] standard, including HEPA [High-efficiency particulate air] filtration of incoming and outgoing air. The QC3 standard utilises equipment to maintain a biological barrier such as steam autoclaves, personal showers, disinfection dunk tanks, gaseous fumigation, and high-efficiency particulate air filtration, which is HEPA filtration, that captures particles and viruses as small as 0.3 microns—that is, one-third of one-millionth of a metre.

3.25 The proponent agencies stated that the CSIRO has maintained co-located facilities at the Australian Animal Health Laboratory (AAHL) for nearly 30 years, without any cross-contamination.

8 Dr C. Grant, DAFF, transcript of evidence, 27 March 2013, p. 7.
9 Mr P. Moore, DAFF, transcript of evidence, 27 March 2013, p. 12.
10 For example, Submissions 4, 5, 6, 8, 13 and 18.
11 Dr C. Grant, DAFF, transcript of evidence, 27 March 2013, p. 4.
12 Commonwealth Scientific and Industrial Research Organisation.
13 Dr C. Grant, DAFF, transcript of evidence, 27 March 2013, p. 4.
3.26 The proponent agencies quoted correspondence from the microbiological security manager of the AAHL facility, which states that AAHL provides a world-best practice facility:

AAHL has 26 co-located PC3 [Physical Containment Level 3] animal facilities and has been operating a variety of experiments with a range of different animal pathogens in side-by-side PC3 facilities for almost 30 years with no recorded cross-contamination occurring between adjacent rooms.\[14\]

3.27 Similarly, the Elizabeth Macarthur Agricultural Institute (EMAI) at Camden in Western Sydney maintains various facilities in a single building and considers this to be best practice. There are also international examples of avian facilities located within a single building.\[15\]

3.28 Such facilities require containment for each quarantine cohort (physical separation from other animals or items), and strict personnel operating procedures to ensure that contamination does not occur through human movement:

We can provide both of those within the one [building] envelope. The issue is the actual facility in which the organism is held and, as both CSIRO and EMAI indicate, this can be achieved, and is achieved, concurrently in Australia—modern standards—and is being done all over the world. We can do that side by side and the operating practices for those treat each of those individual holding facilities as a separate operating entity. They will only be accessed through air vents and showering in and out facility. There will be no connection with the adjacent facility, which will also have to have in and out showering and management. So they are, effectively, separated. They are in one envelope only.\[16\]

3.29 These structural and operational standards prevent an exotic disease outbreak or other contamination issue from spreading to other cohorts in the building or facility:

You can deal with that on a structural basis—that is, from an engineering perspective, which this design is a large part of. So the avian facility is designed and engineered to ensure the biocontainment of those goods inside each individual unit within that avian facility. What we do in respect of that is that, from an engineering perspective, we have multiple levels of redundancy in the event of systems failure or an outbreak of an exotic disease.

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14 Dr C. Grant, DAFF, *transcript of evidence*, 27 March 2013, p. 4.
15 Dr C. Grant, DAFF, *transcript of evidence*, 27 March 2013, p. 4.
16 Dr C. Grant, DAFF, *transcript of evidence*, 27 March 2013, p. 5.
Then we back that up with our operational procedures, and our operational procedures then provide another level of security in what we are trying to achieve from a biosecurity perspective. So the design of the avian facility is based on the assumption that any individual unit that we have put forward in our concept design could be harbouring an exotic disease at any given time. So it is engineered to ensure that, if there is a disease outbreak there, it cannot spread to another consignment that might be operating next door—but, I emphasise, in a very separate engineered and biosecure area.\textsuperscript{17}

**Committee comment**

3.30 The Committee appreciates submissions from industry representatives regarding the avian facility and thanks the public for its involvement in the inquiry.

3.31 The Committee remains concerned that the proponent agencies have not convinced industry that co-locating avian quarantine facilities in a single building is appropriate from a biosecurity standpoint.

3.32 At the Committee’s request, DAFF established an expert advisory group to provide independent advice on this matter. The report of the expert advisory group concluded that biocontainment level 3 is ‘suitable for the containment of avian pathogens and that the design of the government’s proposed avian quarantine building has the necessary features to ensure biocontainment of an exotic disease outbreak within any of the building’s biosecure subunits.’\textsuperscript{18}

3.33 The findings of the expert advisory group should provide the basis for better consultation with industry stakeholders.

**On-site accommodation**

3.34 Many submissions called for the provision of on-site accommodation for the horse and live egg facilities, to enable owners or support staff to reside at the facility during the quarantine period.\textsuperscript{19}

3.35 The proponent agencies explained that the design provides a rest area for industry representatives, which would include a tea point, toilet facilities, and a shower.\textsuperscript{20}

\textsuperscript{17} Mr A. McDonald, DAFF, *transcript of evidence*, 27 March 2013, p. 6.

\textsuperscript{18} DAFF/DoFD, Submission 1.8, p. 5.

\textsuperscript{19} For example, Submissions 7, 9, 10 and 19 (horses) and Submissions 5, 6, 8, and 12 (avian).

\textsuperscript{20} Mr J. Scanlan, Sinclair Knight Merz, *transcript of evidence*, 27 March 2013, p. 8.
3.36 The proponent agencies explained that support staff must be awake to monitor the quarantined animals or items, so there is limited benefit in having people sleeping on-site. However, the proponent agencies confirmed that 24-hour access to the site will be available, so that support staff can remain on-site to monitor their animals.\(^{21}\)

3.37 Some existing sites do provide on-site accommodation.\(^{22}\) However, the proponent agencies quoted from recent correspondence with the Executive Director of Biosecurity Victoria regarding this issue:

> Experience has shown that housing grooms and other industry personnel within a quarantine facility actually adds to the risks associated with personnel entry, particularly out of hours. With appropriate monitoring technology installed and the proposal to have DAFF staff present at the facility 24 hours a day there is no justification for the construction of housing accommodation for grooms and other visiting industry personnel within the facility.\(^{23}\)

**Committee comment**

3.38 The Committee accepts that the provision of on-site accommodation has been appropriately considered by the proponent agencies.

**Training track**

3.39 Harness Racing Australia called for the inclusion of a training track at the PEQ facility.\(^{24}\)

3.40 The proponent agencies indicated that there is some land on the Mickleham site that is currently earmarked for future expansion. Using that land for items that prohibit future expansion (such as a training track) may compromise the longevity of the site.\(^{25}\)

3.41 The proposed design incorporates basic exercise needs for horses. Moving horses either individually or in cohorts to and from a training track would have implications for biosecurity.\(^{26}\) Furthermore, a dedicated training track would have other implications for the PEQ facility:

> … the government’s primary objective here in designing this new quarantine facility is to meet the biosecurity needs of these animals

\(^{21}\) Dr C. Grant, DAFF, *transcript of evidence*, 27 March 2013, p. 8.

\(^{22}\) Mr A. McDonald, DAFF, *transcript of evidence*, 27 March 2013, p. 8.

\(^{23}\) Dr C. Grant, DAFF, *transcript of evidence*, 27 March 2013, p. 9 (quoting Dr Hugh Millar, tabled correspondence, 25 March 2013).

\(^{24}\) Submission 15, p. 2.


\(^{26}\) Dr C. Grant, DAFF, *transcript of evidence*, 27 March 2013, p. 10.
and other commodities being imported. Other exercise or training options of a non-quarantine nature are, at the moment, not part of our plans for a government-run facility. A training track … would involve an increased movement of people into and out of the complex. DAFF officers would certainly need to be involved whenever the training track was in use to ensure that biosecurity controls continued to be met. [The facility would] need to be redesigned to ensure that the minimum 100-metre separation is achieved if such a facility were to be incorporated in the design. Infrastructure beyond just the construction of the track would be required. This would include double fencing, laneways, equipment storage and decontamination facilities. As also identified in the evidence put forward, we would also have to be mindful of the native grassland in any consideration if this were to be contemplated in the future.27

3.42 The proponent agencies indicated that they would investigate exercise options as the project design is progressed.28

Committee comment

3.43 The Committee acknowledges that the proponent agencies have considered the feasibility of a training track on the site, and provided valid reasons for not including one in the project.

Final Committee comment

3.44 The Committee conducted an inspection at the existing Spotswood facility and observed the dated features and close proximity of different species. The Committee thanks the staff at the Spotswood site for their enthusiastic and informative responses to questions.

3.45 The Committee remains concerned that the proponent agencies have not been able to satisfy stakeholder concerns regarding the biosecurity of the avian facility. The Committee expects better consultation with industry stakeholders during the life of the project.

3.46 The Committee was satisfied with the evidence provided by the proponent agencies regarding the proposed construction of a new post-entry quarantine facility at Mickleham, Victoria. The Committee is satisfied that the project has merit in terms of need, scope and cost.

3.47 Proponent agencies must notify the Committee of any changes to the project scope, time and cost. The Committee requires that a post-

27 Mr A. McDonald, DAFF, transcript of evidence, 27 March 2013, pp. 9-10.
28 Mr A. McDonald, DAFF, transcript of evidence, 27 March 2013, p. 10.
implementation report be provided on completion of the project. A template for the report can be found on the Committee’s website.

3.48 Having regard to its role and responsibilities contained in the *Public Works Committee Act 1969*, the Committee is of the view that this project signifies value for money for the Commonwealth and constitutes a project which is fit for purpose, having regard to the established need.

**Recommendation 1**

The Committee recommends that the House of Representatives resolve, pursuant to Section 18(7) of the *Public Works Committee Act 1969*, that it is expedient to carry out the following proposed work: Construction of a new post-entry quarantine facility at Mickleham, Victoria.