

Issues and Conclusions

Environmental Considerations

Environment Protection and Biodiversity Conservation Act 1999

3.1 According to Defence's main submission, an Environmental Review determined that the proposed works do not require referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), but identified the following potential threats:

- impacts to marine biota from the construction and operation of the new wharf; and
- impacts to marine mammals from underwater noise and vibration during construction activities.

A subsequent investigation of these issues concluded that:

...while some impacts may occur, they are not deemed to be significant.¹

3.2 When questioned about the potential environmental impacts of the project, Defence stated that the Northern Territory Wildlife Park had recently dived in the basin at HMAS *Coonawarra* and had commented

¹ Appendix C, Submission No. 1, paragraphs 25 - 26

favourably on the water quality and abundant marine life, which includes dolphins, crocodiles and sea turtles.²

- 3.3 Members noted that the works involved the driving of marine piles, which creates considerable noise underwater, and queried the effect this would have on dolphins. Defence responded that:

...given the noise travel in the water, the topography of the harbour and the transient nature of marine mammals, the chance of an incident occurring was low, notwithstanding that there is a process that is within the controls that if marine mammals are sighted in the vicinity while construction is taking place then there are procedures that have to be taken.³

Environmental Management Plan

- 3.4 Defence's main submission stated that mitigation of non-significant environmental impacts arising from construction activities would be addressed through the implementation of an Environmental Control Plan, adding that such an approach had proven successful with wharf extension works undertaken to date.⁴ The Committee sought an explanation as to how and by whom such a plan would be devised, implemented and monitored.
- 3.5 Defence explained that, like all Defence bases, HMAS *Coonawarra* operates under a Base Environmental Management Plan which remains in force before, during and after any proposed construction activities. In addition to the general Environmental Management Plan, Defence proposes to develop and implement a separate Construction Environmental Management Plan (CEMP) specifically relating to the new works. The CEMP would be devised by the contractor carrying out the works and would be overseen by Defence's environmental officer.⁵
- 3.6 Given that the proposed works do not constitute a controlled action under the terms of the EPBC Act, and would therefore, not be subject to external scrutiny, Committee members were concerned to ensure that internal oversight of the CEMP by Defence personnel would provide sufficient environmental protection. Defence assured the Committee that it maintained close consultation with the Department of Environment and Heritage (DEH) to ensure that all self-regulatory activities meet DEH
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2 Appendix D, Official Transcript of Evidence, page 8

3 *ibid*, page 10

4 Appendix C, Submission No. 1, paragraph 26

5 Appendix D, Official Transcript of Evidence, pages 10 - 11

requirements. Further, Defence highlighted its 25-year record of sound environmental management in the area, stating that it was

...actually promoting marine life in that environment.⁶

- 3.7 At the Committee's request, Defence tabled copies of the *HMAS Coonawarra Environmental Management Plan Phase 3 Environment and Heritage Strategy*, prepared by Brown and Root Services Asia Pacific Pty Ltd in June 2001, and the *Darwin Naval Base Environmental Review*, completed by Bill Ross and Associates in July 2004.

Excavation of Hardstand Area

- 3.8 In addition to the project's potential impact upon the marine environment, the Committee was also concerned that appropriate environmental impact studies and mitigation measures would be applied to the proposed excavation of the expanded hardstand area. Defence assured members that the excavation would entail the extension by four metres of an existing excavation in an area which had already been subject to considerable disturbance, and that no heritage issues had been identified.⁷

Dredging

- 3.9 The Committee was interested to know whether there would be any dredging activities associated with the proposed works. Defence responded that dredging of the harbour basin was not included in the current proposal, but was executed at regular intervals as part of routine maintenance operations. Dredging was carried out in 1999 and is scheduled to occur again in 2006.
- 3.10 Whilst acknowledging that the dredging of the basin lies outside the scope of the proposed works, Committee members were concerned to ensure that Defence would take due cognisance of the serious environmental impacts of dredging, and monitor the process appropriately in consultation with the relevant authorities. Defence responded that the execution and monitoring of dredging activities were covered in the *HMAS Coonawarra Environmental Management Plan Phase 3 Environment and Heritage Strategy*, which was supplied to the Committee subsequent to the public hearing.⁸

6 Appendix D, Official Transcript of Evidence, page 10

7 *ibid*, page 9

8 *ibid*, pages 17 - 18

- 3.11 The Environmental Management Plan identifies sedimentation resulting from dredging as a potential impact upon water quality at HMAS Coonawarra and, in respect of dredging activities, stipulates that:
- approval must be obtained from the Northern Territory Department of Lands, Planning and Environment;
 - marine water quality sampling must be conducted during operations; and
 - dredging and subsequent disposal of soil must be undertaken in a way that minimises reduced water quality.⁹

Recommendation 1

The Committee recommends that the Department of Defence maintain close consultation with the Northern Territory Department of Lands, Planning and Environment to ensure minimisation of damage to the marine environment occasioned by dredging activities at *HMAS Coonawarra*.

Ecologically Sustainable Development (ESD) and Energy Management

- 3.12 In its main submission, Defence stated that:

The design of all power supply, electrical and mechanical equipment will include an assessment of energy use applying life cycle costing techniques and power demand analysis.

- 3.13 At the public hearing, the Committee asked whether the proposed energy use assessment had been conducted and what results, if any, had been produced. Defence replied that to date, it had determined the anticipated annual power consumption for the facility. This figure would provide the basis for improving the overall energy efficiency of the facility during the detailed design phase. Improvements may be achieved through such measures as the installation of energy efficient light fittings and controls that turn off lights when rooms are not in use.¹⁰
- 3.14 The Committee also noted Defence's statement that the facility

⁹ *HMAS Coonawarra Environmental Management Plan Phase 3 Environment and Heritage Strategy*, Table 5.5

¹⁰ Appendix D, Official Transcript of Evidence, page 5

...may incorporate building management systems [BMS], metering and other provisions to measure energy use and allow regular energy audits.¹¹

Members were interested to know whether a decision had been reached regarding these proposed measures. Defence responded that it was trying to install BMSs throughout its bases, however, given the relatively small size of the new Port Services Organisation building, it would be unlikely to have a BMS of its own, but may be linked into another base or similar building.¹²

Zoning and Approvals

3.15 As the proposed works will be located on Commonwealth land, Defence is not bound by the office building approval requirements of the Northern Territory Department of Infrastructure, Planning and Environment which stipulate:

- a height limitation of seven metres; and
- provision of 2.5 car-parking spaces per 100 square metres of net lettable floor area.¹³

3.16 Defence proposes, however, that the operations room area of the new Port Services Organisation building, which has a requirement to view the harbour and its approaches, will have a height of eight metres.¹⁴

3.17 Whilst acknowledging that the local planning requirements do not apply on Commonwealth land, the Committee wished to ensure that Defence had consulted with the relevant Northern Territory authorities, both in the interest of being a good citizen and to mitigate any future problems that may arise.

3.18 Defence responded that it maintained close contact with the local authorities and community, through regular industry briefings and an annual Northern Territory Government – Defence consultative forum. In respect of the proposed eight metre height of the Port Services Organisation building, Defence stated that:

11 Appendix C, Submission No. 1, paragraph 57

12 Appendix D, Official Transcript of Evidence, page 6

13 Appendix C, Submission No. 1, paragraph 46

14 *ibid*, paragraph 47

...there has been no feedback from any of the local authorities that they have any concerns over that.¹⁵

Scope of Works

Support Cradles

- 3.19 Defence's submission reported that, as the ACPBs have a wider beam and a different hull shape to the FREMANTLE Class Patrol Boats, changes would be required to the cradles which support the boats out of the water. Defence stated that these cradles would be modified where possible, or constructed new.¹⁶
- 3.20 At the hearing, the Committee sought confirmation as to whether the existing cradles would be adapted or new cradles constructed. Defence replied that, under the current proposal, two of the existing cradles would be modified and one new cradle would be built. Defence explained that the decision to have three dedicated ACPB cradles had been based on an analysis of the deployment and maintenance requirements of the ACPB fleet.¹⁷

Synchrolift

- 3.21 The Committee observed that the proposed extension of the synchrolift would interfere with the RAN's ability to remove ships from the water for maintenance or other purposes, and wished to know what measures would be taken to minimise disruption to normal operations during the course of the works. Defence responded that the staging of the works would take account of both the dry/wet season turnover and the maintenance cycle of the vessels. Defence assured the Committee that, in the past, there had been no difficulty in scheduling operations and boat movements to accommodate routine maintenance, which had rendered the synchrolift inoperable for periods of a few weeks. On this basis, Defence did not anticipate that the proposed upgrade of the synchrolift would impede operations.¹⁸

15 Appendix D, Official Transcript of Evidence, page 4

16 Appendix C, Submission No. 1, paragraph 32

17 Appendix D, Official Transcript of Evidence, pages 6 - 7

18 *ibid*, page 16

- 3.22 Defence added that, in the event of an emergency, there were commercial facilities available in Darwin that could lift boats from the water.¹⁹

Working Accommodation

- 3.23 In respect of the indicative working accommodation layout provided at Figure Four of Defence's main submission, the Committee wished to know how much space would be provided for each workstation, based on the anticipated number of occupants. Defence replied that it intended to observe standard Defence Public Service guidelines, which allocate an average of 6.5 meters per workstation area and 12 square metres for each office.²⁰

Fire Protection Systems

- 3.24 Defence's main submission stated that all fire protection requirements would, as a minimum, comply with the requirements of the Building Code of Australia (BCA), adding that:

Any recommended departures from Building Code of Australia requirements in relation to the project will be technically assessed by Defence specialist fire protection staff.²¹

- 3.25 Given the importance of fire protection, the Committee requested that Defence elaborate on the philosophy to be adopted in the design of the fire protection systems, and upon any anticipated departures from the BCA. Defence explained that the proposed Standby Crew and Port Services Organisation building would comply with the standard BCA requirements, rather than employing an engineered solution, and that no departures from the code were currently anticipated. The Chair requested that Defence provide the Committee with details of the fire protection system, including any departures from the BCA requirements, when these had been determined.²²

19 Appendix D, Official Transcript of Evidence, page 16

20 *ibid*, page 15

21 Appendix C, Submission No. 1, paragraph 56

22 Appendix D, Official Transcript of Evidence, page 21

Recommendation 2

In view of the importance of fire protection and evacuation measures, the Committee recommends that the Department of Defence supply it with details of the fire protection system proposed for the Standby Crew and Port Services Organisation building, including any departures from the requirements of the Building Code of Australia, when these have been determined.

Economic Considerations

Construction Workforce

- 3.26 At the public hearing, the Committee sought clarification as to the number of workers anticipated to be employed throughout the construction works. Defence confirmed that it would expect a maximum of 20 workers on-site during peak construction and that additional employment would be associated with off-site prefabrication and material preparation.²³ Defence added that the principal contractor on the wharf extension works undertaken to date was a Darwin company employing local subcontractors.²⁴
- 3.27 The Committee was interested to learn more about the local construction market; specifically, what additional costs were incurred by the relatively remote location, and whether there was an over-reliance on government contracts. Defence stated that it had undertaken a number of projects in the region in recent years and had a sound appreciation of the local market. Generally, Defence observed that construction prices in the Northern Territory had been escalating at a significantly higher rate than in other parts of Australia, particularly across certain trades and skills. Defence attributed this to isolation, a shortage in some trades, and to the large number of mining operations and other projects, which were offering high rates of pay to attract workers.²⁵

23 Appendix D, Official Transcript of Evidence, page 12 and Appendix C, Submission No. 1, paragraph 65

24 *ibid*, page 13

25 *ibid*, page 20

Economical Design Solutions

3.28 The main submission recorded that, as the proposed work is an extension of an existing facility, there were no realistic alternative siting options. Defence noted, however, that:

...a number of technical options have been explored which resulted in more economical design solutions.²⁶

3.29 At the request of the Committee, Defence explained that foremost among the cost-effective design solutions was the decision to collocate the ACPB Standby Crew and Port Services Organisation facility in a single building. Other measures included the re-use and modification of existing boat support cradles, a decrease in the width of the wharf extension and the value-management of the proposed Standby Crew and Port Services Organisation building to minimise the contingency requirement and to ensure the nest possible value for money.²⁷

Recommendation 3

The Committee recommends that the proposed upgrade of patrol boat facilities at HMAS *Coonawarra*, Darwin, proceed at the estimated cost of \$19.2 million.

Hon Judi Moylan MP

Chair

17 August 2005

²⁶ Appendix C, Submission No. 1, paragraph 21

²⁷ Appendix D, Official Transcript of Evidence, page 19

