
The Parliament of the Commonwealth of Australia

Defence Science and
Technology Organisation
Ordnance Breakdown
Facility, Port Wakefield,
South Australia

Parliamentary Standing Committee on Public Works

March 2005
Canberra

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Membership of the Committee

Chair Hon Judi Moylan MP

Deputy Chair Mr Brendan O'Connor MP

Members Mr John Forrest MP

Mr Harry Jenkins MP

Mr Bernie Ripoll MP

Mr Barry Wakelin MP

Senator Alan Ferguson

Senator Michael Forshaw

Senator the Hon Judith Troeth

Committee Secretariat

Secretary Mrs Margaret Swieringa

Inquiry Secretary Ms Vivienne Courto

Research Officer Mr Raymond Knight

Administrative Officer Mr Peter Ratas



List of Abbreviations

Defence	Department of Defence
DSTO	Defence Science and Technology Organisation
EOB	Explosive Ordnance Breakdown
PAD	Pre-acquisition Declaration
P&EE	Proof and Experimental Establishment



Extract from the Votes and Proceedings of the House of Representatives

No. 13 dated Wednesday, 9 February 2005

**PUBLIC WORKS – PARLIAMENTARY STANDING COMMITTEE –
REFERENCE OF WORK – ORDNANCE BREAKDOWN FACILITY, PROOF
AND EXPERIMENTAL ESTABLISHMENT SITE, PORT WAKEFIELD, SOUTH
AUSTRALIA**

Dr Stone (Parliamentary Secretary to the Minister for Finance and Administration), pursuant to notice, moved – That, in accordance with the provisions of the *Public Works Committee Act 1969*, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for consideration and report: Ordnance breakdown facility, proof and experimental establishment site, Port Wakefield, South Australia.

Question – put and passed.



List of Recommendations

3 Issues and Conclusions

Recommendation 1

The Committee recommends that the proposed construction of an ordnance breakdown facility for the Defence Science and Technology Organisation at Port Wakefield, South Australia, proceed at the estimated cost of \$8.4 million.

Introduction

Referral of Work

- 1.1 On 9 February 2005⁴ the proposed construction of an ordnance breakdown facility for the Defence Science and Technology Organisation (DSTO) at Port Wakefield, South Australia, was referred to the Public Works Committee for consideration and report to the Parliament in accordance with the provisions of the *Public Works Committee Act 1969* (the Act).¹ The proponent agency for this work was the Department of Defence (Defence).
- 1.2 The Hon Dr Sharman Stone MP, Parliamentary Secretary to the Minister for Finance and Administration, advised the House that the estimated cost of the proposed works was \$8.4 million. Dr Stone noted further that, subject to parliamentary approval, the works would commence mid-2005 with a view to completion by mid-2006.

¹ Extract from the *Votes and Proceedings of the House of Representatives*, No. 11, Thursday, 9 December 2004

Background

Existing Facilities

- 1.3 Research into explosive ordnance and weapons is necessary to support deployed troops and Defence training. Currently, most ordnance testing and research is carried out at DSTO Edinburgh, near Adelaide, SA and the Proof and Experimental Establishment (P & EE) at Port Wakefield.²

Site of the Proposed Work

- 1.4 The proposed Explosive Ordnance Breakdown (EOB) facility is to be located at the site of the existing DSTO P & EE at Port Wakefield, some 100 kilometres north of Adelaide, SA. The site is within reasonable proximity to ordnance breakdown personnel based at DSTO Edinburgh.³
- 1.5 Whilst the EOB facility will be located on Commonwealth land, it was necessary for Defence to purchase some adjacent property in order to provide an appropriate safety buffer zone. Between July and November 2002, Defence purchased land from three parties. Acquisition costs to date total \$642,300 (paragraphs 31 - 32).

Inquiry Process

- 1.6 The Committee is required by the Act to consider public works over \$6 million⁴ and report to Parliament on:
- the purpose of the work and its suitability for that purpose;
 - the need for, or the advisability of, carrying out the work;
 - whether the money to be expended on the work is being spent in the most cost effective manner;
 - the amount of revenue the work will generate for the Commonwealth, if that is its purpose; and

² Appendix C, Submission No. 1 from the Department of Defence, paragraph 2

³ *ibid*, paragraph 7

⁴ *Public Works Committee Act 1969*, Part III, Section 18 (8)

-
- the present and prospective public value of the work.⁵

1.7 The Committee called for submissions by advertising the inquiry in *The Plains Producer* on Wednesday 9 March 2005. The Committee also sought submissions from relevant government agencies, local government, private organisations and individuals, who may be materially affected by or have an interest in the proposed work. The Committee subsequently placed submissions and other information relating to the inquiry on its web site in order to encourage further public participation.

Inspection and Public Hearings

1.8 On 21 April 2005 the Committee inspected the site and environs of the proposed works, and received a commercial-in-confidence briefing on project costs. A public hearing was held in Port Wakefield later that day.⁶

⁵ *Public Works Committee Act 1969*, Part III, Section 17

⁶ See Appendix D for the official Hansard transcript of the evidence taken by the Committee at the public hearing on Thursday, 21 April 2005 in Port Wakefield

The Proposed Works

Purpose

- 2.1 The purpose of the proposed work is to provide a facility that will enhance Defence research capability in respect of explosive ordnance and weaponry.¹

Need

- 2.2 Research into weapons and ordnance is necessary to support the work of the Australian Defence Force (ADF) and associated organisations in ensuring national security.²
- 2.3 At present, research into weapons and ordnance is conducted at two locations in South Australia; namely the Defence Science and Technology Organisation Facility (DSTO) at Edinburgh and the Proof and Experimental Establishment (P&EE) at Port Wakefield. Prevailing safety requirements at these sites currently limit investigation to small-size ordnance. The proposed work would address this deficiency by enabling research into a wider range of explosive ordnance and weapons³

¹ Appendix C, Submission No. 1, paragraphs 1 - 4 and 8

² *ibid*, paragraph 5

³ *ibid*, paragraphs 1 - 4

Scope

- 2.4 Defence proposes that the new facility will comprise the following elements:
- a control room for the remote monitoring and operation of ordnance breakdown equipment in other areas of the facility;
 - a cutting building for the radiography and remotely controlled cutting of ordnance;
 - a disassembly building for the safe radiographic examination and breakdown of explosive ordnance;
 - two explosive ordnance storehouses;
 - a storage building to house general equipment;
 - engineering services, including power, water, sewerage, communications and sealed roads; and
 - security provisions, comprising fencing and a Type 1 security system.⁴
- 2.5 Further, Defence intends that the facility should be constructed to meet specific requirements in respect of protective and information security, and to ensure the safety of materiel, personnel and the public.⁵ Specifically, the proposed facility should meet the following performance criteria:
- provide adequate amenities for personnel;
 - be able to operate 24 hours per day;
 - be sited in accordance with Siting Board recommendations;
 - be sited so as not to impinge upon public access areas;
 - meet all relevant codes and standards;
 - meet Defence accommodation standards;
 - comply with Defence energy consumption requirements;
 - comply with the P&EE Environmental Management Plan; and

⁴ Appendix C, Submission No. 1, paragraph 9

⁵ *ibid*, paragraph 6

- maximise use of existing P&EE facilities.⁶

Suitability

2.6 In seeking to deliver an expanded ordnance research capability, Defence considered three options:

- do nothing;
- upgrade existing facilities at DSTO Edinburgh, SA; and
- construction of a new facility at Port Wakefield, SA.

2.7 Defence rejected the 'do nothing' option on the basis that it would not address the existing capability deficiency, while the upgrade of the Edinburgh facilities was rejected as it could not satisfy public and departmental safety requirements. The preferred option, to construct a new ordnance breakdown facility at Port Wakefield, will

- deliver the required capability;
- address all safety requirements; and
- maximise cost-effectiveness through use of existing support services and infrastructure.⁷

Project Delivery

2.8 It is anticipated that the project will be delivered by means of a construction contract under the Defence Head Contract agreement.⁸ Subject to parliamentary approval, it is proposed that construction will commence in late 2005, with a view to project completion by late 2006.⁹

⁶ Appendix C, Submission No. 1, paragraph 13

⁷ *ibid*, paragraph 10

⁸ *ibid*, paragraph 40

⁹ Appendix D, Official Transcript of Evidence, page 2

Cost

2.9 The estimated cost of the proposed works is \$8.4 million. This figure was determined at a ninety percent level of design and includes:

- construction costs;
- professional design and management fees;
- furniture, fittings and equipment; and
- allowances for contingency and escalation.¹⁰

¹⁰ Appendix D, Official Transcript of Evidence, page 2

Issues and Conclusions

Security and Safety

- 3.1 Defence's submission to the inquiry identified 'protective security' as a key consideration governing the design of the proposed EOB facility.¹ Specific security measures described in the submission include installation of a Type 1 security system and the extension of the existing P&EE perimeter fence to enclose the new facility.²
- 3.2 At the public hearing, the Committee sought clarification of the specifications for the proposed security arrangements. Defence explained that the measures included in the works proposal would ensure a level of security at the new facility commensurate with that of the existing P&EE site. To this end, it is proposed that security provisions at the site would comprise both perimeter fencing, to prevent the inadvertent or deliberate incursion of members of the public, and an alarm system within the site to guarantee security of discrete building elements. Defence undertook to supply confidential written details of the specific elements comprising a Type 1 security system to the Committee at a later date.
- 3.3 The Committee was also concerned to ensure that the proposed works would guarantee public safety. Defence assured members that the testing area at the site was clearly marked and signposted, and that radar

¹ Appendix C, Submission No. 1, paragraph 6.a

² *ibid*, paragraphs 9.g and 24

monitoring was activated during firing activities to prevent incursions into the range.³

Environment and Heritage

3.4 At the public hearing, the Committee explored a number of environmental issues arising from the Defence proposal.

Soil Contamination

3.5 In view of Defence evidence to the effect that soil contamination constituted the most significant environmental risk at the site⁴, the Committee sought further information the nature and resolution of this matter. Defence confirmed that the contamination referred to was of the type usually associated with farming activities and was concentrated on the land currently occupied by the farm and piggery. Given that the area is intended to serve primarily as a 'buffer zone' around the EOB site, the Committee queried whether rehabilitation of the soil was essential and cost-effective. Defence replied that it takes its environmental responsibilities very seriously and, whilst the contamination is not serious, will be remediating the site at the earliest opportunity.⁵

Flora and Fauna

3.6 In respect of the effects of the proposed work upon local flora and fauna, Defence submitted that there would be no impact upon any plants of significance and further, that the development may improve conditions for the survival of the vulnerable Slender-billed (Samphire) thornbill.⁶ At the hearing, Defence elaborated on this, stating that the thornbills were monitored on an annual basis, and that the department had received recognition for its treatment of local endangered species. The Committee was informed that the P&EE site had been nominated for inclusion on the Ramsar List of Wetlands of International Importance, and had met four of

³ Appendix D, Official Transcript of Evidence, page 4

⁴ Appendix C, Submission No. 1, paragraph 34

⁵ Appendix D, Official Transcript of Evidence, pages 5 - 6

⁶ Appendix C, Submission No. 1, paragraph 38

the eight criteria for listing. Defence assured the Committee that Ramsar listing would not impede core operations at the site.⁷

Waste Disposal

3.7 The Committee was concerned to ensure that no deleterious environmental impacts would arise from the ordnance testing and disassembly activities carried out at the site. Defence stated that the proposed ordnance breakdown buildings would be designed to meet standard requirements for the handling of explosives and other hazardous materials, and that none of these materials would be released into the environment. Defence explained that a key reason for collocating the EOB facility with the existing P&EE was that the site was well-equipped to execute the environmentally safe handling and disposal of explosives and associated materials. Further, as the activities to be carried out at the new EOB facility would be an extension of existing site functions, it is expected that only small amounts of waste would be added to the current disposal system.⁸

Cultural Heritage

3.8 Defence submitted that an Environmental Impact Assessment had determined that the proposed works would not impact upon any indigenous heritage sites of significance.⁹ At the public hearing, the Committee sought clarification as to the nature of the heritage survey. Defence replied that an indigenous heritage survey had been conducted as part of the project investigations and that while four sites of significance had been identified, none of these was within ten kilometres of the proposed EOB facility site.¹⁰

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

⁸ *ibid*, page 7

⁹ Appendix C, Submission No. 1, paragraph 35

¹⁰ Appendix D, Official Transcript of Evidence, page 7

Building Standards

Accommodation Standards

3.9 Defence's main submission stated that the proposed EOB facility would meet Defence accommodation standards "where feasible".¹¹ The Committee sought clarification as to the nature of these accommodation standards and the circumstances under which they may not be achievable in the new facility. Defence responded that the standards referred to in the submission were the *Department of Defence Accommodation Guidelines for Open Plan Office Environment 1996*. Specifically, there had been some concern as to whether these standards could be met in the proposed main control building, but at the public hearing, Defence expressed confidence that required standards would be met throughout the facility.¹²

Green Star Rating

3.10 Under normal circumstances, Defence designs new facilities to achieve a minimum four-star rating on the Green Building Council of Australia Green Star rating scheme. However, Defence noted in its submission that the specialised security and safety requirements of the proposed new ordnance breakdown facility would preclude many of the usual ecologically sustainable design features, but that such features would be incorporated wherever practicable.¹³ At the public hearing, Defence explained that the Green Star rating scheme had been designed for office accommodation and that there were difficulties inherent in adapting the requirements to the unique facilities proposed for construction at the P&EE site. Nevertheless, Defence outlined its intention to integrate a range of ecologically sustainable design features into the EOB buildings, including the installation of a cost-effective and automatically controlled air-conditioning system, and the inclusion of roof insulation.¹⁴

¹¹ Appendix C, Submission No. 1, paragraph 13.f

¹² Appendix D, Official Transcript of Evidence, page 5

¹³ Appendix C, Submission No. 1, paragraph 14

¹⁴ Appendix D, Official Transcript of Evidence, page 10

Associated Works

- 3.11 The Committee sought to discover whether there were any other services or facilities required by the DSTO Weapons Systems Division that might logically have been included in the current works project. Defence responded that, while this would depend upon any future tasks given to the Division, the department believed that the proposal before the Committee would satisfy all its requirements.¹⁵

Land Acquisition

- 3.12 In order to provide an appropriate safety buffer for the new EOB facility, it was necessary for Defence to acquire a farmhouse, piggery and farmland adjacent to the existing P&EE site. In its submission to the inquiry, Defence reported that this acquisition took place in 2002 at a cost of \$642,300,

...with negotiations currently underway to resolve any outstanding claims for these properties.¹⁶

- 3.13 At the public hearing, Committee members inquired how the land acquisition process was progressing. In particular, the Committee wished to learn about any unresolved matters and whether these may impact upon the project cost or schedule. Defence responded that it was acquiring three parcels of land from three separate owners, under the provisions of the *Land Acquisition Act 1989*. The acquisition of the first parcel of land had been completed at the time of the hearing, whilst the two remaining landowners had been presented with pre-acquisition declarations (PADs). Defence explained that, following the presentation of the PAD, and the absence of any appeals, the usual course of events was for the Commonwealth to pay the landowner 90 per cent of the value of the land up-front, with the remaining ten per cent to be paid upon completion of negotiations. Defence reported that the ninety per cent payment had been made to the two other landowners from which property was to be acquired, and that final negotiations were in train.¹⁷

¹⁵ Appendix D, Official Transcript of Evidence, page 9

¹⁶ Appendix C, Submission No. 1, paragraphs 31 - 32

¹⁷ Appendix D, Official Transcript of Evidence, pages 2 - 3

Consultation

3.14 Having received no public submissions to its inquiry, the Committee sought confirmation that this indicated general approval of the project throughout the community. Defence advised that it had undertaken extensive consultation with local Federal and State representatives, and with relevant government agencies at the Federal, State and local level. Further, Defence stated that the base had close ties with the local community and was held in high regard.¹⁸

Port Wakefield Council

3.15 Prior to the public hearing, the Committee received a letter from the Wakefield Regional Council regarding the Proof Range Road, which lies within the Council's jurisdiction. Whilst having no objection to the works proposal, the Council expressed concern that the expansion of the P&EE facility would increase use, and thereby the maintenance requirements, of the road. In view of this, the Council requested that the Commonwealth bear responsibility for future roadworks, in consultation with the Council's Infrastructure Services Manager.

3.16 The Committee explored this claim with Defence at the public hearing. Defence replied that the Council should approach the Department formally, with a view to reaching an agreement for the maintenance of the road on a cost-apportionment basis. Defence added that it did not believe that maintenance of the Proof Range Road was the Department's responsibility, but would welcome the opportunity to liaise directly with the Council in respect of the matter.¹⁹

Local Employment

3.17 According to Defence's submission, it is estimated that proposed EOB facility works will engage an average of ten personnel, with a maximum of 20 at peak construction.²⁰ The Committee invited Defence to comment on any opportunities that the project may generate for local workers and

¹⁸ Appendix D, Official Transcript of Evidence, page 8

¹⁹ *ibid*

²⁰ Appendix C, Submission No. 1, paragraph 29

businesses. Defence responded that, while employment opportunities would depend upon the skill sets available in the region, the Department would encourage its contractors to hire locally where possible.²¹

Recommendation 1

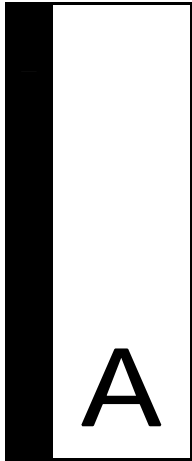
The Committee recommends that the proposed construction of an ordnance breakdown facility for the Defence Science and Technology Organisation at Port Wakefield, South Australia, proceed at the estimated cost of \$8.4 million.

Hon Judi Moylan MP

Chair

1 June 2005

²¹ Appendix D, Official Transcript of Evidence, page 9



Appendix A – List of Submissions

Submissions

1. Department of Defence



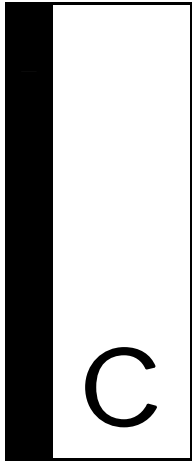
Appendix B – List of Witnesses

Dr Warren Harch, Chief, Weapons Systems Division, Defence Science and Technology Organisation

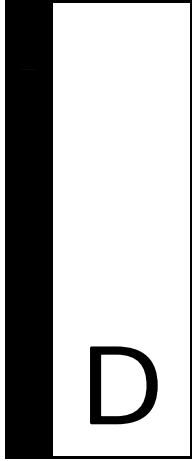
Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, Department of Defence

Lieutenant Colonel Gary Potter, Commanding Officer, Joint Proof and Experimental Unit, Department of Defence

Lieutenant Colonel Stuart Yeaman, Project Director, South Australia, Department of Defence



Appendix C – Submission No. 1 from the
Department of Defence



Appendix D – Official Transcript of
Evidence