
The Parliament of the Commonwealth of Australia

Remediation of Defence Land at Neutral Bay, Sydney, NSW

Parliamentary Standing Committee on Public Works

8 February 2001
Canberra

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Membership of the Committee

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Extract from the Votes and Proceedings of the House of Representatives

No. 130 dated Thursday, 17 August 2000

23 PUBLIC WORKS-PARLIAMENTARY STANDING COMMITTEE-REFERENCE
OF WORK-REMEDICATION OF DEFENCE LAND AT NEUTRAL BAY, SYDNEY

Mr Slipper (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: Remediation of Defence land at Neutral Bay, Sydney.

Question-put and passed.



List of abbreviations

BTEX	Benzene, Toluene, Ethylene and Xylene
CLMA	<i>Contaminated Lands Management Act 1997</i> (NSW)
CRG	Community Reference Group
DCP	Development Control Plan
DoD	Department of Defence
EPA	New South Wales Environmental Protection Authority
EPAA	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
LEC	Land and Environment Court of New South Wales
NSLEP	North Sydney Local Environment Plan
PAH	Polycyclic Aromatic Hydrocarbons
RAN	Royal Australian Navy
RANTME	Royal Australian Navy Torpedo Maintenance Engineering
TPH	Total petroleum hydrocarbons
TRG	Technical Reference Group



List of recommendations

Recommendation 1

The Committee recommends that the Minister for Defence write to the New South Wales Environment Protection Authority requesting that the Authority consider issuing an investigation order under Part 3 of the *Contaminated Land Management Act 1997* (NSW) in respect of the Iora residential site, after the former *HMAS Platypus* site is remediated. (Paragraph 3.25)

Recommendation 2

The Committee recommends that the Department of Defence investigate the possibility of being compensated for any damage caused by the migration onto the former *HMAS Platypus* site of off-site contaminants, and costs associated with remediation and installation of a management system for such contaminants. (Paragraph 3.26)

Recommendation 3

The Committee recommends in respect of future submissions relating to land remediation, that the Department of Defence and other agencies provide the Committee, in the interest of public accountability and transparency, with an independent audit of the project's budget. (Paragraph 5.10)

Recommendation 4

The Committee recommends that the excavation of the cliff line at the former *HMAS Platypus* site proposed by Department of Defence proceed after features of heritage value, identified by Australian Heritage Commission have been photographed and appropriately documented. This should be done in consultation with the Australian Heritage Commission and the Australian National Archives. (Paragraph 6.22)

Recommendation 5

The Committee recommends the excavation of the cliff line at the former *HMAS Platypus* site proposed by the Department of Defence proceed, to the extent that the cliff's profile reproduces the basic vertical character of the current cliff line. (Paragraph 6.23)

Recommendation 6

The Committee recommends that the Department of Defence consider establishing a web site for the purposes of keeping the community informed of the project's status, promoting the benefits of the project and facilitating the project's implementation. (Paragraph 7.10)

Recommendation 7

The Committee recommends that the Department of Defence establish a complaint-response mechanism in order that complaints concerning the proposed works can be effectively and efficiently addressed. (Paragraph 7.11)

Recommendation 8

The Committee recommends that the Department of Defence:

- continue discussions with the New South Wales Waterways Authority as to the future of the wharf at former *HMAS Platypus* with a view to resolving the issue as quickly as possible; and
- provide the Committee, within 12 months, with a report detailing Department of Defence plans with respect to the future of the wharf at former *HMAS Platypus*. (Paragraph 8.9)

Recommendation 9

The Committee recommends that the proposed remediation of Defence land at Neutral Bay, Sydney, New South Wales proceed at a cost of \$16.5 million. (Paragraph 9.7)

Introduction

Inquiry process

- 1.1 On 17 August 2000, the Parliamentary Secretary to the Minister for Finance and Administration referred a proposal for the remediation of Department of Defence (DoD) land at Neutral Bay, Sydney, New South Wales, in accordance with the provisions of the *Public Works Committee Act 1969*.¹
- 1.2 The Committee sought submissions for the Inquiry by advertising the proposed work in *The Sydney Morning Herald* on 2 September 2000.
- 1.3 Letters seeking submissions were also sent to those likely to have an interest in the Inquiry. This included Commonwealth, State and local government agencies, Federal and State government representatives and a range of peak organisations, professional bodies and individuals representing various interest groups.
- 1.4 On 25 October 2000, a sectional Committee, established by the Committee inspected the site for the proposed remediation, former *HMAS Platypus*, High Street, North Sydney, New South Wales and was briefed by DoD representatives. Following the inspection, the Committee held a public hearing at the site. A list of witnesses who appeared at the public hearing is at Appendix A and a list of submissions at Appendix B.²

1 The Hon Peter Slipper MP, Parliamentary Secretary to the Minister for Finance and Administration, House of Representatives, *Votes and Proceedings*, p. 1475, 17 August 2000.

2 The Committee's proceedings will be printed as Minutes of Evidence.

Scope of the proposal

- 1.5 The proposed works are to take place on the site of former *HMAS Platypus*, High Street, Neutral Bay. The proposed works involve an extensive ground remediation program, the main elements of which comprise:
- the demolition of designated structures;
 - the removal of foundations, pipelines and redundant services;
 - the excavation and off-site disposal of contaminated soil and bedrock;
 - the excavation, processing and on-site treatment of highly contaminated materials prior to disposal off-site;
 - the disposal and/or recycling of contaminated water encountered during the course of the works;
 - the backfilling and regrading of the lower levels of the site with clean materials; and
 - a range of activities allowing for environmental protection, materials handling, health and safety and investigative works.³

Site location and description

- 1.6 The site for the proposed remediation is situated in the lower North Shore Sydney suburb of Kirribilli, forming part of the city of North Sydney. The site is located on Neutral Bay which forms part of Sydney Harbour and covers an area of 1.835 hectares. The site is currently owned by the Commonwealth.⁴ The site is bounded by:
- Neutral Bay to the East; Kesterton Park to the South;
 - High Street to the West; and
 - residential areas to the south, west and north of the site.

3 Exhibit 2, p. 1 and Evidence, p. 9.

4 Appendix C provides a plan of the site and shows the location of naval structures.

- 1.7 Access to the site is provided from High Street and Kiara Close. The site, while industrial in nature, is surrounded by residential properties and open space recreation areas. The site is approximately 3km from the Sydney CBD.
- 1.8 Adjoining the site is a submarine wharf. The wharf has an area of approximately 3,385 m². The wharf is on land leased from the New South Wales Waterways Authority.
- 1.9 The topography of the site is divided into three sections. The upper level, occupied by a car park, is accessed from Kiara Close and has a length of 180 metres and a depth of 20 metres. This level is situated between the cliff face and the Iora development and is approximately 18 metres above the lower level of the site.
- 1.10 The middle level consists of the Royal Australian Navy Torpedo Maintenance Engineering (RANTME) building and the guard house between High Street and Neutral Bay. The middle level is approximately 60 metres in length and 110 metres in width. This level is higher than the lower level and a sea wall exists between Neutral Bay and the RANTME building.
- 1.11 The lower level of the site is situated between the cliff face and Neutral Bay. The level is approximately 190 metres in length and 45 metres in width. The lower level is accessed from High Street.
- 1.12 No vegetation exists on the site, except for a small grassed bank behind the Stores Building and around the RANTME building and the adjacent Retort House.⁵

The cost

- 1.13 The estimated cost of the proposed works is \$16.5 million.⁶ This includes design, site establishment and environmental controls, demolition, excavation, treatment and removal of contaminated materials, backfilling and compaction of clean fill, seawall protection works and management of contaminated groundwater.⁷ The estimated cost includes a construction

5 The Retort House is a prefabricated iron-framed building imported into Australia in the nineteenth century. The Retort House is the oldest surviving structure on the site.

6 Evidence, p. 12.

7 Evidence, p. 12.

contingency and a price indexation adjustment over the proposed remediation period.⁸

History of site

1.14 The site has had three main uses since European settlement of the area. The following is a basic timeline of the site history:

- Prior to 1876 the site is believed to have been part of the whaling and mercantile allotments which were situated between Careening Cove and Neutral Bay.
- From 1876-1942 the site was used for gasworks by the North Shore Gas Company (which became part of the Australian Gas Light Company).⁹
- In 1942 the lower portion of the site was transferred to the Commonwealth for use by naval authorities and for the next 25 years was used as a support facility for submarines based at *HMAS Penguin*, torpedo maintenance and other support for the Royal Australian Navy (RAN) Destroyer fleet. In 1967 the site was commissioned as *HMAS Platypus*, the eastern Australian base for the Oberon class submarines. That function continued until May 1999 when the facility was de-commissioned.
- Between 1942-1980 the upper portion of the site continued to be used as a gas distribution facility.
- In 1980 the gas distribution facility was decommissioned and the site developed as the residential developments known as Iora.
- In 1998, naval activities ceased on the site.¹⁰

1.15 In 1995 the RAN engaged PPK Environment and Infrastructure to undertake a preliminary contamination assessment of the site.¹¹ This assessment was done in parallel with disposal planning studies DoD initiated in November 1996 through two public meetings at North Sydney Council.¹² From these meetings a 17 member Community Reference Group

8 Evidence, p. 12.

9 For a comprehensive history of the gasworks see: Rosemary Broomham, *History of the Gasworks Site High Street, Neutral Bay*, 1984.

10 Exhibit 5, pp. 32 and 35-38.

11 Exhibit 6, p. 3.

12 Exhibit 6, p. 3.

(CRG) was formed, including 12 community representatives.¹³ In addition, a separate Technical Reference Group (TRG) was established to keep the North Sydney Council technical staff apprised of matters relating to the site.¹⁴

- 1.16 Planning concluded in November 1997 and the DoD then lodged a development application with the North Sydney Council for a residential land use scheme comprising 95 dwellings and approximately 5,400m² of public space.¹⁵
- 1.17 Subsequently, the North Sydney Council refused the development approval and the DoD lodged an appeal with the Land and Environment Court of New South Wales (LEC). The LEC upheld the appeal in October 1998. The judgment imposed a requirement for the site to be remediated and for development to have been substantially commenced before 14 October 2003.

13 Exhibit 6, p. 3.

14 Exhibit 6, p. 3.

15 Exhibit 6, p. 3.

Decision of the Land and Environment Court of New South Wales

Summary

- 2.1 The case of *Commonwealth of Australia vs North Sydney Council (unreported, 1998)* involved an appeal to the Land and Environment Court of New South Wales (LEC) by the Department of Defence (DoD) against North Sydney Council's refusal of an application for a medium density residential development on the former *HMAS Platypus* site. The main issues in dispute were the amount and location of public open space to be included as part of the development and the visual impact of the development in relation to its surroundings.
- 2.2 The LEC allowed the DoD's appeal and approved the development. It also found in favour of the DoD regarding the major condition attaching to development consent, that of the standard to which the site was to be remediated.

Relevant legislation

- 2.3 The principal legislation governing planning and development approval processes in New South Wales is the *Environmental Planning and Assessment Act 1979* (EPAA). By virtue of section 6 of the Act, the EPAA binds the Commonwealth, except where it is inconsistent with Commonwealth law or where the doctrine of Commonwealth immunity

from State law applies. In practice, this meant that the DoD did not have to comply with the EPAA when engaging in activities that were supported by the defence power of the Commonwealth Constitution¹ including the removal of excess buildings and the remediation of the site prior to vacating it. However, it appears that it was bound by the EPAA in developing the site for commercial purposes, hence the need to lodge a development application.²

- 2.4 The *Contaminated Lands Management Act 1997* (NSW) (CLMA) also applied to the former *HMAS Platypus* site. The CLMA, which repealed the *Environmentally Hazardous Chemicals Act 1985* (NSW), did not actually come into effect until August 1998 (just after the case had been heard). However, the transitional arrangements under the CLMA meant that pre-existing contamination was subject to the clean-up and auditing provisions of the CLMA.

Background

- 2.5 The DoD lodged its development application for 95 dwellings with the North Sydney Council on 19 December 1997. At that stage the various remediation and other clean-operations, including excavation works, were not complete. As part of its application, it appears that the DoD requested what is known under the EPAA as a deferred commencement consent to the development. This means that the consent does not have effect until the applicant subsequently fulfils prescribed conditions to the satisfaction of the 'consent authority' (which, as in this case, will generally be the local council).
- 2.6 The North Sydney Local Environment Plan (NSLEP) in force at the time of the development application permitted the former *HMAS Platypus* site to be used for residential-flat buildings, provided Council approval was obtained for any such developments.
- 2.7 Subsequently, the North Sydney Council also created a development control plan (DCP) specifically for former *HMAS Platypus site*. Like LEPS,

1 Section 51 (vi).

2 There was no explicit statement in the judgment about the applicability of the EPAA. The case law regarding the application of State planning legislation to commercial redevelopment of Commonwealth properties remains somewhat unclear. However, it is arguable that the immunity doctrine does not shield the Commonwealth from State laws of general application where, for example, the Commonwealth is carrying out activities in common with private citizens: *Residential Tenancies Tribunal of NSW; ex parte Defence Housing Authority* (1997) 146 ALR 495.

DCPs generally contain factors to be considered in considering a development approval, but, unlike LEPs, are not legally binding. They are also generally more detailed. The drawings included in the former *HMAS Platypus* DCP indicated that the North Sydney Council intended that almost all the site within 35 metres of the waterfront side should be designated as public open space. While there was no dispute that the DCP had come into effect in February 1998, the North Sydney Council contended that it had been prepared in November 1997 (that is, before the development application was lodged), but elsewhere in the judgment it is implied that it was not prepared until January 1998.

- 2.8 Notice of the development application was advertised by the North Sydney Council for public comment on 5 January 1998. The standard period for public comment is generally 14 days. The EPAA provides that if no decision is made on a development application within a certain period, it is deemed to have been refused.
- 2.9 Section 90 of the EPAA required the North Sydney Council, as consent authority, to consider a range of matters in reaching its decision on the development application. In the context of the former *HMAS Platypus* development, relevant section 90 matters included:
- the provisions of relevant environmental planning instruments (such as LEPs);
 - the relationship and appropriateness between the characteristics of the development (eg height, design, external appearance) and the site;
 - the direct environmental impacts of the development;
 - the impact the development will have on its surroundings beyond the site (including amenity and economic and social effects);
 - the public interest; and
 - public submissions received.
- 2.10 The relevance and respective weight given to any of the matters as part of its consideration is up to the consent authority to decide.³
- 2.11 The North Sydney Council's reasons for refusing the application were paraphrased in its statement of issues lodged as part of the legal proceedings. The key points in the statement that were subsequently considered in the judgment included:

3 *Parramatta Sports Club v. Hale* (1982) 47 LGRA 319.

- whether the proposed waterfront dwellings on the northern sector of the site are appropriate or whether that part of the site should be provided for as public open space in accordance with the Platypus DCP;
- the visual impact of the proposed development
- the impact of the proposal on the amenity of neighbouring residential properties;
- whether potential contamination of the site has been properly addressed; and
- whether the spiral ramp at the northern end of the site is appropriate.

The major issues in the Judgment

Open space

- 2.12 The development application submitted by the DoD allocated approximately 5,500 square metres or somewhat over 30% of the total former *HMAS Platypus* site to open space.⁴ By contrast, it appears the former *HMAS Platypus* DCP purported to require over 8,000 square metres. The major difference was that the DCP widened a 10 metre strip along the waterfront in the north-east of the site to approximately 35 meters, with a consequential reduction in the number of near-waterfront residences on the site.
- 2.13 Section 94 of the EPAA provides that, if the consent authority is satisfied that if a development is likely to increase the demand for public amenities or public services in the area, the authority may require the applicant to make a financial payment and/or dedicate land free of cost as a condition of approving the development. Thus where a new development would increase the number of residents in an area, it could require part of the site to become public open space, so as the increased population did not put more pressure on existing public space. The North Sydney Council could also require the developer to provide funds for other purposes, such as expanding childcare facilities, public housing or other community facilities, or to undertake relevant landscaping, parking or roadworks.

4 The Commonwealth led evidence that the land value of the open space was between \$8 million and \$12 million.

- 2.14 However, the EPAA provides that any financial or land contribution required by council or other authority under section 94 as a condition of development consent must be in accordance its relevant contribution plan.
- 2.15 In relation to providing open space on the site, evidence was led that the North Sydney Council's section 94 contribution plan required a contribution of 5.2 square metres per person, which given the number of proposed new residences in the development application, translated to 1071 square metres. According to the judgment, the DoD's development application appeared to dedicate 1400 squares metres for this purpose. However, it is not clear to what extent, if any, the extra 329 square metres was intended reduce its direct financial contribution.⁵ The remaining 4100 square metres of open space appear to be mainly via an extension of existing parkland into the south-east corner of the site.
- 2.16 The North Sydney Council contended that the former *HMAS Platypus* DCP should be the basis of any development proposed for the land. The North Sydney Council argued that the 10 metre waterfront strip incorporated into the development application would be uninviting and unlikely to be used by anyone else other than the residents whose houses would directly front on it.
- 2.17 However, Justice Sheahan preferred the evidence of the Defence witness, commenting that this evidence contained
- examples...in which relatively narrow access ways have elsewhere proved highly successful as public open space and pedestrian linkages.⁶
- 2.18 Justice Sheahan considered that the DCP, in designating so much of the former *HMAS Platypus* site as open space, was inconsistent with the provisions of the NSLEP. Although not explicitly stated in the judgment, presumably the legally binding nature of LEPs as compared to DCPs, would mean that LEPs take precedence over DCPs were they are inconsistent. In relation to the North Sydney Council's motivations, Justice Sheahan said that it could be inferred that a least one of the underlying intentions of the DCP was to make the waterfront area almost unusable for anything other than public space. His Honour went on to say that

5 Condition 19 attached to the LEC's decision put the direct financial contribution that the DoD was to make to the North Sydney Council at \$51,388. This total was allocated towards four purposes: library acquisition (\$9,686), library building equipment (\$1,731), community centres (\$19,089), and childcare (\$20,882).

6 Exhibit 1, p. 50.

The Court does not subscribe to the notion that publicly owned land should simply be provided to the local or regional public without financial adjustment.⁷

- 2.19 It appears therefore that his Honour may have viewed the North Sydney Council's actions as rather opportunistic in trying to obtain a large area of open space for its own benefit without compensating the owner.

The design of the development and its visual impact

- 2.20 This aspect of the case centred on evidence presented by mainly expert witnesses about the size, character and positioning of the residences (which varied from two to six stories). Some of the design features opposed by the North Sydney Council, such as a spiral vehicular ramp connecting the clifftop with the lower levels of the development were redesigned just before or during the hearing, presumably as a part of a compromise between the parties. After the evidence, and assessing the design changes made by the DoD to the original development application, Justice Sheahan found for the Commonwealth, concluding that:

The development provides an entirely appropriate and adequate solution to the reuse of a relatively difficult site presently used for a quasi industrial activity...The residential accommodation proposed is likely to constitute a high quality and generally desirable inner residential development.⁸

Contaminated lands

- 2.21 One of the conditions to which development consent was contingent was the remediation of the site under the CLMA. The only major area of disagreement between the parties was the appropriate remediation standard. Under the CLMA, a range of guidelines have been developed and /or endorsed which provide remediation procedures and outcomes for various situations. The CLMA also provides for accredited auditors to certify whether sites have been remediated to the standards set down in the relevant guidelines.
- 2.22 It appears that the North Sydney Council wanted the site remedied to a zero contamination level, thus doing away with the need of any ongoing monitoring. By contrast, the DoD wanted standard CLMA requirements.

7 Exhibit 1, p. 50.

8 Exhibit 1, p. 51.

The Court commented that the North Sydney Council's position was probably motivated by:

[concerns] that it may not have the same protection in respect of the dedicated land as any purchaser of the balance of the site.⁹

2.23 Justice Sheahan did not elucidate on this point and there no evidence in the judgment about the North Sydney Council's future liabilities under the CLMA once land passed to its control as public open space.

Issues arising from the judgement

2.24 Following the public hearing, the Committee raised with the DoD a number of legal issues relating to the judgement of the LEC, in particular the following questions:

- (i) Does the cliff line have to be removed or further modified by reason of the judgment?; and
- (ii) What approvals are required if it was intended to proceed with development of the site differently from that approved in the development consent issued by the Land and Environment Court of New South Wales?

2.25 In respect to the first question, the DoD advised the Committee that the judgment of the LEC granted a development consent for the construction of 95 dwellings but did not impose any obligation to undertake the works which are approved by the development consent.¹⁰

2.26 However, the DoD also advised that, in its opinion, where the approved development is commenced, the applicant/landowner must comply with the terms of the development consent issued by the Court. The conditions applicable to the proposed development do not contain any express requirement which refers to the cliff line or requires its modification, except that the site must be remediated to the standards required by a Site Auditor accredited under the CLMA.

2.27 The Department of Defence advised the Committee that it had received advice which indicated that, in order to remediate the site to the requisite standard it would be necessary to, at least, make substantial modifications to the existing cliff line. It followed, in the DoD's opinion, that if the

⁹ Exhibit 1, p. 53.

¹⁰ Exhibit 7, paragraph 17.

deferred commencement were to be satisfied it would be necessary to make substantial modifications to the cliff line.¹¹

- 2.28 The DoD also advanced the argument that as the judgement of the LEC was based on the proposition that the cliff will be removed in a way which is defined by a site contour plan. As such, while it could be said that there is no compulsion on the DoD or the landowner to modify the site in accordance with that plan, logic dictates that the development consent cannot be implemented unless the site is modified in accordance with the plan.¹²
- 2.29 In respect to the second question, the DoD advised that Committee that under New South Wales and Commonwealth law it would be necessary to apply for and obtain development consent for the proposed alternative development.¹³

11 Exhibit 7, paragraph 17.

12 Exhibit 7, paragraph 17.

13 Exhibit 7, paragraph 17.

The need for the work

Introduction

- 3.1 In evidence to the Committee, the Department of Defence (DoD) advised that in 1995, in anticipation of the introduction into service of the Collins class submarines, to be based in Western Australia, former *HMAS Platypus* was declared surplus to DoD requirements.¹ From 1995 until 2000, contamination testing of the site was undertaken in parallel with land use planning studies to determine future use of the property.
- 3.2 The DoD advised the Committee that when properties are declared surplus to requirements, the DoD seeks to secure the relevant approvals for future land use prior to disposal so as to maximise the revenue return from a future sale.²
- 3.3 The remediation of the former *HMAS Platypus* site is intended to mitigate Commonwealth liability for the contamination of the site and to maximise the revenue to the Commonwealth from the sale of the site.³

Contamination of site

- 3.4 Scientific evidence submitted to the Committee as part of the Inquiry process indicated that the activities carried out on the site have resulted in

1 Evidence, p. 26.

2 Evidence, p. 26.

3 Evidence, pp. 9 and 26.

numerous sources of potential and actual contamination. The principal types of contaminants on the site include:

- polycyclic aromatic hydrocarbons (PAH's);
- total petroleum hydrocarbons (TPH);
- benzene;
- phenolic compounds;
- complex cyanides;
- cresols;
- heavy metals;
- sulfate; and
- toluene and xylenes.⁴

3.5 Scientific evidence presented to the Committee suggests that the use of the site as a gasworks between 1876 and 1941 resulted in most of the contamination. Contamination that may have resulted from the operation on the site of the RAN include:

- leakage of fuels, oils or sludge from underground storage tanks and associated pipeworks;
- spillage of fuels or oils on the ground surface during refuelling of vehicles;
- spillage of fuel in the area of the boiler house;
- ash, cinders and decomposed bitumen;
- spillage of transformer cooling oil; and
- imported fill.⁵

3.6 Scientific evidence obtained from the extensive sampling of the site indicated that fill beneath the upper carpark contains arsenic, copper, lead, mercury, TPH and PAH's.⁶ There is a BTEX (benzene, toluene, ethylene and xylene) concentration near the administration building at the upper entrance to site.⁷ The fill on top of the Bunker House contains TPH, PAH's, copper, lead and zinc.⁸ Fill beneath the floor of the Bunker House and

4 Exhibit 3, pp. 1-11 and Evidence pp. 16-20.

5 Exhibit 4, p. 39.

6 Exhibit 4, p. 45.

7 Exhibit 4, p. 45.

8 Exhibit 4, p. 45.

directly south of the Bunker House contains TPH, PAH's and lead.⁹ Fill beneath the navy's factory building contains chromium, copper, lead, nickel, mercury, TPH, phenol's sulphates and cyanides.¹⁰ Also, fill beneath the lower level of the site contains PAH's and lead, zinc, mercury, ammonia, sulphates, TPH and BTEX.¹¹

- 3.7 Scientific evidence indicated that groundwater beneath and around the site is contaminated with PAH's, arsenic, chromium, copper, nickel, zinc, total cyanide, ammonia and sulphates and to a lesser extent with TPH, BTEX and phenol's.¹² Analysis of samples from boreholes drilled near the western border of the site indicate that contaminated groundwater is flowing onto the site. Scientific evidence indicates that this water is coming from the direction of the Iora property.¹³ The contaminants identified in the groundwater are nickel, zinc, total cyanide, ammonia and soluble sulphates.¹⁴

Commonwealth liability

- 3.8 The mitigation of Commonwealth liability for the contamination of the site was a stated rationale given by the DoD for the need for the proposed works.¹⁵ Prior to the public hearing, the Committee sought a legal advice from the DoD regarding this issue. The Committee requested the DoD to provide advice regarding:
- (i) the potential liability of the Commonwealth in respect of existing contamination on the site; and
 - (ii) whether NSW law required thorough removal of contamination in order to redevelop the site and stop off-site pollution?
- 3.9 The advice received by the Committee addressed the issues raised by (i) above in terms of liability under the common law and the *Contaminated Land Management Act 1997* (NSW) (CLMA). In respect of liability under the common law, the Committee was advised that if contamination on, or issuing from, the site causes death, personal injury or damage to property

9 Exhibit 4, p. 45.

10 Exhibit 4, p. 45.

11 Exhibit 4, p. 45.

12 Exhibit 4, p. 51.

13 Exhibit 4, p. 51.

14 Exhibit 4, p. 51.

15 Evidence, pp. 9 and 26.

(including any reduction in the value or utility of land adjoining the site caused by the transport of contaminants across the site boundaries), the Commonwealth would be liable at common law for those consequences.¹⁶

- 3.10 If the site were disposed of without remediation, the Committee was advised that the Commonwealth would no longer be liable in trespass or nuisance for any death, personal injury or damage to property which might arise from future migration of contaminants from the site.¹⁷ However, it remained possible that the Commonwealth's liability in negligence would continue.¹⁸ The legal advice in respect to liability under the common law concluded that:

the physical removal of all relevant contaminants from the site, in reliance on the advice of expert remediation consultants and an accredited land auditor would reduce the risk that any death, injury or damage to property would occur and will be matters of great relevance in determining whether the Commonwealth had discharged its common law duty of care in negligence.¹⁹

- 3.11 In respect to Commonwealth liability under the CLMA, the Committee was advised by the DoD that if the New South Wales Environmental Protection Authority (EPA) has reasonable grounds to believe that contamination of the site presents a significant risk of harm to human health, or to some other aspect of the environment, it is empowered to require the Commonwealth to investigate and report on the contamination on the site.²⁰ Where such a process establishes contamination presents a significant risk to human health or to some other aspect of the environment the EPA could require the Commonwealth to remediate the site and to monitor the effectiveness of that remediation.²¹ The legal advice also stated that:

The meaning of the expression 'significant risk of harm to human health or to some other aspect of the environment' has not been the subject of any judicial determination since introduction of the CLM Act, however, on the evidence available in respect of the site, there is at least a possibility that such a risk exists.²²

16 Exhibit 8, p. 1.

17 Exhibit 8, p. 1.

18 Exhibit 8, pp. 1 and 2.

19 Exhibit 8, p. 2.

20 Exhibit 8, p. 2.

21 Exhibit 8, p. 2.

22 Exhibit 8, p. 2.

- 3.12 The Committee was also advised through the DoD legal opinion that the Commonwealth would not be exposed to investigation or remediation orders under the CLMA after it has disposed of the site, except if the Commonwealth had principal responsibility for the contamination of the site.²³ On the basis historical and scientific evidence presented to the Committee it appears that only a relatively minor part of the contamination on the site could be attributed to the Commonwealth. Once this contamination is removed, the exception referred may not be applicable.
- 3.13 The legal opinion received by the Committee also addressed the issues raised by question whether New South Wales law required thorough removal of contamination in order to redevelop the site and stop off-site pollution, in terms of requirements imposed by the common law and the CLMA. In respect to the common law, the Committee was advised that the common law contains no principle which draws any distinction between techniques of remediation and as such the reduction or elimination of future liability is a matter of risk assessment based on expert advice.²⁴ The Committee was also advised that, in practical terms, this means that the objective in each case must be, with the assistance of expert advice, to remove any practical possibility that contamination on the site will cause any death, personal injury or damage to property.²⁵
- 3.14 In respect to requirements imposed by the CLMA, the Committee was advised that the CLMA does not draw any distinction between any particular technique of remediation, and that the critical criterion under the Act is a risk assessment. That is, the removal of any significant risk of harm to human health or any other aspect of the environment.²⁶
- 3.15 In addition, the legal opinion advised that the CLMA provides for a system of accredited contaminated land auditors who are empowered to issue statutory site audit statements. In general terms, the effect of the scheme is to require the accredited auditor to be satisfied that the site is suitable for a particular use before the proposed new use is carried out. In respect to the proposed remediation, the Committee was advised that the LEC decision requires a site audit statement to be issued before the site can be redeveloped for housing.²⁷

23 Exhibit 8, p. 3.

24 Exhibit 8, p. 3.

25 Exhibit 8, p. 3.

26 Exhibit 8, p. 3.

27 Exhibit 8, p. 3.

- 3.16 Further, the Committee was advised through the legal opinion that it will be a matter for the accredited auditor to decide whether all contaminants must be removed from the site, or alternatively, whether removal only down to a particular depth will be required in order to achieve an appropriate level of future risk.²⁸ The accredited Site Auditor for the proposed remediation is Dames & Moore Pty Ltd, which submitted a summary site audit report on 29 November 1999.²⁹

Liability for contamination from the Iora site

- 3.17 The accredited Site Auditor concluded that seepage from the Iora site through the sandstone cliff face on the site has been assessed as having a potential to cause adverse health effects under extreme conditions. Additionally, the blue staining associated with this seepage has also been identified as an aesthetic issue requiring consideration.³⁰
- 3.18 Following the public hearing, the Committee sought advice from the accredited Site Auditor whether in his opinion excavation of the rock cliff is required to achieve the remediation standards set for the site. The accredited site auditor advised that excavation of the rock face:
- would provide a high degree of certainty that the environmental standards set for the site are achieved;
 - if the cliff is not excavated, detailed investigation and validation would be required; and
 - based on the tar already observed, at least selective excavation of the cliff would be required.³¹
- 3.19 The Committee noted that in January 1989 contaminated stormwater runoff from Iora residential site was investigated and notice under Regulation 21 of the *Clean Waters Act* (NSW) was issued.³² Sumps were installed below the Iora carpark and water collected and tested before discharge to the sewer system.³³ Further, in 1991 the North Sydney Council requested further investigation of blue staining at the Iora site. A New South Wales State Pollution Control Commission inspection determined that the

28 Exhibit 8, p. 3.

29 Exhibit 9.

30 Exhibit 9, p. 53.

31 Exhibit 10.

32 Submission, Environment Protection Authority, 18 October 2000, p. 9.

33 Submission, Environment Protection Authority, 18 October 2000, p. 9.

colouration was likely to be cyano-containing vapours or contaminated groundwater rising to the surface and reacting with iron in the sandstone used as a decorative trim.³⁴ In September 1997, the DoD forwarded a report to the New South Wales Environment Protection Authority indicating groundwater entering the DoD site was contaminated with gaswork related contaminants.³⁵

- 3.20 The Committee sought from the DoD advice as to who has legal responsibility for contamination of the DoD site from the Iora site. The DoD advised that at common law, the DoD is entitled to be compensated for any damage, by the owner of the Iora site caused by migration of contaminants across the boundary from the Iora site.³⁶ In addition, the DoD advised that it was entitled to restrain future cross-boundary migration of contaminants.³⁷
- 3.21 Further, the DoD also advised the Committee that under the CLMA, which applies to the Iora site, if the cross-boundary migration of contaminants represents a significant risk of harm, the EPA has the power to require the Iora site to be investigated and remediated to remove the risk.³⁸

Conclusions

- 3.22 Based on evidence presented as part of the Inquiry process, the Committee is of the opinion that the contamination on the site is causing ongoing pollution to the Neutral Bay area and the surrounding environment and is indicative of a need for the proposed works. The Committee is also of the opinion that, as the future use of the site is restricted while the contamination remains, for this reason also, there is an identified need for the proposed works.
- 3.23 The Committee is of the opinion that remediation of the site may mitigate the Commonwealth's liability for contamination of the site and is indicative of a need for the proposed works.
- 3.24 While the extent and nature of contamination from the Iora property has yet to be determined, the Committee notes that under the remediation

34 Submission, Environment Protection Authority, 18 October 2000, p. 9.

35 Submission, Environment Protection Authority, 18 October 2000, p. 9.

36 Exhibit 7, paragraph 17.

37 Exhibit 7, paragraph 17.

38 Exhibit 7, paragraph 17.

proposal it would be the Commonwealth which would be footing the bill for installing a management system for off-site contamination. In the Committee's opinion, responsibility for drainage from the Iora site is the responsibility of the New South Wales Government, both now and in the future, and the Commonwealth should be exempted from any future legal liability.

Recommendation 1

- 3.25 **The Committee recommends that the Minister for Defence write to the New South Wales Environment Protection Authority requesting that the Authority consider issuing an investigation order under Part 3 of the *Contaminated Land Management Act 1997* (NSW) in respect of the Iora residential site, after the former *HMAS Platypus* site is remediated.**

Recommendation 2

- 3.26 **The Committee recommends that the Department of Defence investigate the possibility of being compensated for any damage caused by the migration onto the former *HMAS Platypus* site of off-site contaminants, and costs associated with remediation and installation of a management system for such contaminants.**

4

Environmental remediation

Introduction

- 4.1 Scientific evidence submitted to the Committee as part of the Inquiry process indicated that the activities carried out on the site have resulted in numerous sources of potential and actual contamination. These contaminants pose a pollution threat to the surrounding environment and limit the future use of the site.

Remediation options

- 4.2 The Department of Defence (DoD), through its consultant Egis Consulting Australia Pty Limited, considered there to be five main options for remediating the site, namely:
- no action;
 - limit future use of the site;
 - treatment for off site disposal to landfill or re-use on-site;
 - cap and contain; or
 - off-site treatment and return to site.¹

¹ Exhibit 11, pp. 54-63.

- 4.3 The DoD, considered that most options were feasible for the site. However, in all cases the on-going liabilities and long term management and future uses of the site and surrounds were the limiting factors.² The DoD considered that due to the contaminants identified on site and the various limiting factors, it would be necessary to use a combined options approach to ensure that the remediation goals are met. As such, the DoD selected bio-remediation³ and thermal desorption⁴ as the primary treatment for highly contaminated soils and tarry wastes and the disposal of all contaminated materials to a licensed landfill facility. The DoD considers the advantages of this approach to be:
- all contamination is removed from the site in one set of works and hence contaminant risk to the surrounding environment is eliminated;
 - works can be conducted over the shortest possible time from to provide a 'no risk' outcome; and
 - the techniques and strategies in undertaking this type of remediation are well understood.⁵

Outline of proposed remediation

- 4.4 The remediation option proposed by the DoD requires the demolition of all structures on the site (apart from certain structures of heritage significance), excavation of contaminated materials and disposal of them off site. Primary treatment of highly contaminated materials will be required on site to reduce contaminant levels to concentrations which enable off site transport and disposal.
- 4.5 Prior to the commencement of works on the site, environmental and safety controls will be installed, including a silt barrier in Neutral Bay.
- 4.6 The proposed demolition works will result in the removal of all aboveground structures on the site, retaining certain structures of heritage

2 Exhibit 11, p. 59.

3 Bioremediation is a term used to describe a range of processes that rely on the biological degradation of organic compounds.

4 Thermal desorption is a term used to describe the use of heat to drive (boil) organic contaminants off solid materials. Once desorbed, the organic off-gas is usually incinerated through an after-burner, or condensed to allow subsequent treatment as a liquid waste.

5 Exhibit 11, pp. 59 and 60.

significance. Building rubble and building waste generated during the works will be transported off site for disposal at licensed facilities.⁶

- 4.7 The proposed remediation works will remove all contaminated soil, tar, sludges and groundwater from the site.⁷ The DoD advised the Committee that the proposed remediation works will result in the remediation of between approximately 26,710m³ and 79,130m³ of contaminated material.⁸ The remediation will be conducted within a purpose designed enclosure. The treatment of solid materials will be by thermal desorption and bioremediation, while disposal of liquids will involve licensed discharge to sewer or disposal at an off site treatment plant.⁹
- 4.8 The cliff to the west of the site is to be excavated to the boundary of the site to remove contamination.¹⁰ The DoD advised the Committee that some area of site bedrock will also be required to be excavated as a consequence, in part, because the rock in the cliff is contaminated with tar seeps.¹¹ The DoD estimates that up to 30, 000m³ of sandstone will be produced from excavating bedrock and sandstone within the cliff.
- 4.9 Uncontaminated sandstone from the cliff will be used as clean fill on the remainder of the site where contaminated materials have been excavated. Where the sandstone is malodorous it will be de-odorised prior to use.¹² At the completion of the remediation works the site will be graded and surface stabilised.¹³

Environmental benefits and impacts

- 4.10 The DoD advised the Committee that the proposed remediation works will have the following long term environmental benefits:
- improvement of the air quality of the area;
 - improvement in the quality of groundwater underlying and discharging from the site;

6 Exhibit 12, p. ii.

7 Exhibit 12, p. ii.

8 Evidence, p. 10 and Briefing to the Parliamentary Standing Committee on Public Works, 25 October 2000.

9 Exhibit 12, p. ii.

10 Exhibit 12, p. ii.

11 Exhibit 12, p. ii.

12 Exhibit 12, p. ii.

13 Exhibit 12, p. ii.

- improvement in the water quality of Neutral Bay;
 - improvement in the site amenity by remediating to a standard that will allow future land uses;
 - retention and more effective presentation of heritage structures on the site; and
 - compliance with principles of ecologically sustainable development.¹⁴
- 4.11 The DoD also advised the Committee of certain of the environmental impacts of the proposed remediation works, including:
- generation of particulates from some stages of the demolition and remediation works;
 - generation of malodorous emissions during stages of the remediation works where highly contaminated materials are handled;
 - generation of observable noise impacts at surrounding residential locations;
 - generation of increased traffic levels; and
 - visual impacts of the works being undertaken.¹⁵
- 4.12 The potential for short term environmental impacts during some stages of the proposed works was an issue of major import for many of those who participated in the Inquiry process.¹⁶ Both prior and during the public hearing the Committee sought to determine what actions the DoD would be undertaking to minimise environmental impacts, in particularly air and noise impacts on surrounding residential locations.¹⁷
- 4.13 The DoD provided the Committee with a detailed description of what actions the contractor would be undertaking to minimise environmental impacts.¹⁸
- 4.14 In respect to environmental control measures, the measures are to include:
- the installation, operation and maintenance of groundwater control measures comprising dewatering systems, groundwater recovery and disposal systems;

14 Exhibit 12, p. iii.

15 Exhibit 12, pp. iii and iv.

16 Evidence, pp. 81 and 112.

17 Evidence, pp. 34-36.

18 Exhibit 13, pp. 64-150.

- the installation, operation and maintenance of equipment control measures comprising wheel wash and truck wash facilities;
- the installation of a silt curtain for the protection of off-site waters surrounding the site;
- should a condition occur where nuisance odours can be detected at the boundaries of the site or where the air quality fails to meet ambient air standards, odour generating work in the affected area will be ceased, if possible, until the necessary odour or air quality control measures have implemented and levels return to acceptable criteria;
- water sprays will be used for dust suppression across unsealed areas of the site, stockpiles and other dust generating areas;
- normal working hours will be as set out in approved working hours documented in the New South Wales Environment Protection Authority (EPA) (1993) Environmental Noise Control Manual;
- equipment operating out in the open areas of the site will be fitted with appropriate residential silencers;
- a designated heavy trucking route will be selected in consultation with North Sydney Council prior to the commencement of the project;
- a vibration monitoring program will be conducted throughout the works for the purpose of monitoring compliance with vibration standards at the boundaries of the site and to demonstrate that site works have not adversely impacted the surrounding communities; and
- the conducting of all potentially hazardous works within a Remediation Enclosure.

4.15 The Committee noted the comprehensive conditions imposed on the DoD in the consent granted by the LEC aimed at minimising environmental impacts, including:

- the site be remediated to the standards required by a Site Auditor accredited under the CLMA;
- the Site Auditor will certify to North Sydney Council and the LEC, that part of the site, which does not include the proposed public open space, is suitable for the residential development;
- the Site Auditor will certify to North Sydney Council and the LEC, that the proposed public open space on the site is suitable for use as a park, recreational open space or a playing field;

- materials or rubbish resulting from the land clearing, demolition and building work, will not be burnt on the site;
- except where approved by the North Sydney Council, demolition, earth works, building construction and landscaping works will be restricted to within the hours of 7.00 am to 5.00 pm Monday to Friday and Saturday to within 8.00 am to 1.00 pm, with no work on Sundays and Public Holidays; and
- excavation works will be restricted to within the hours of 8.00 am to 5.00 pm Monday to Friday only.¹⁹

Conclusion

- 4.16 The Committee is of the opinion that of the remediation options available to the DoD, the selected option offers the greater potential for the DoD to meet its objectives, that is, to mitigate Commonwealth liability for the contamination of the site and to maximise the revenue to the Commonwealth from the sale of the site.²⁰
- 4.17 The Committee acknowledges the arguments of witnesses who supported the 'cap and contain' option. It is also of the view that, while that strategy is attractive from a short term cost perspective, it does little to insure the Commonwealth against future legal exposure and will impact on future residents of the site.
- 4.18 The Committee acknowledges that the proposed remediation will impact on the amenity of nearby residences. However, the Committee is of the view that the conditions imposed by the LEC and actions the contractor would be undertaking, will, as far as is reasonably possible, minimise the impact of the proposed remediation on the amenity of nearby residences.

¹⁹ Exhibit 1, Attachment, pp. i-xvii.

²⁰ Evidence, pp. 9 and 26.

Cost

- 5.1 The cost of the proposed works is \$16.5 million.¹ This includes all design, site establishment and environmental controls, demolition, excavation, treatment and removal of contaminated material, backfilling and compaction of clean fill, seawall protection and management of contaminated groundwater.²
- 5.2 Subject to Parliamentary approval, the remediation works will commence in early 2001, with the objective of having the works completed by December 2002.³ The project will be implemented as a managing contractor contract.
- 5.3 A number of aspects of the cost of the project were raised by the Committee with the Department of Defence (DoD) during the Inquiry process. These included:
- independent audit;
 - GST;
 - haulage of waste materials; and
 - low densit option;

1 Evidence, p. 12.

2 Evidence, p. 12.

3 Evidence, p. 26.

Independent audit

- 5.4 It has been the Committee's experience with remediation works that such projects often experience cost over-runs that are significantly more than the original cost submitted to the Committee. The Committee is of the view that the construction budgets for remediation projects must include adequate contingency allowances that are well above those normally allocated to other projects. The Committee considers there is a need for such high contingency allowances because of the greater levels of uncertainty associated with remediation projects.
- 5.5 Prior to the Public Hearing the Committee requested that the DoD obtain an independent audit of the budget for the proposed works. Subsequently, the DoD provided the Committee with an independent audit, undertaken by the firm of Sinclair Knight Merz Pty Ltd.
- 5.6 The independent audit concluded that there was a high level of confidence that the cost to remediate should lie within the project budget. The main findings of the assessment, upon which the conclusion was based, were:
- all major tasks required to remediate the site appear to have been adequately reflected in the schedule of tasks specified in the project cost details;
 - the quantities used in the project costing appear to be reasonable and provide an appropriate level of contingency;
 - the unit rates used in the project costing appear to be generally consistent with market rates or conservatively defined; and
 - the remediation strategy is one that is most likely to minimise commercial risks.
- 5.7 While concluding that there is a high level of confidence that the cost to remediate the site should lie within the project budget, the independent auditor recommended that certain actions be undertaken, including:
- in relation to the dewatering of excavations and water disposal –
 - ⇒ Thiess include in their equipment spread sufficient spare pumping capacity to provide backup in case there is a breakdown in the 100m diameter pump that has been allowed for in the project budget for a period of 76 weeks.
 - ⇒ Thiess has in place procedures for accessing additional pumping capacity in emergency situations.

- ⇒ Thiess plan the excavations in such a way that dewatering flows can be discharged into soaker pits located within unremediated areas of the site that are designed to provide sufficient retention capacity.
 - ⇒ The width of the soil barrier be increased to 4m in order to minimise seawater migration into the excavation area.
 - ⇒ Consideration be given to including a sub-soil drain at the base of the soil barrier that can be used to remove seawater prior to it being impacted by leachate from the site.
 - In regards to unit rates in the project costing, the auditor recommended:
 - ⇒ Arrangements should be made for landfills to accept loads in wet weather; ensuring excavations and water inflows are properly managed to avoid construction delays; and program work to ensure alternate tasks are available for equipment during wet weather.
 - ⇒ The project budget is exclusive of GST charges. An additional allowance will need to be included should the project budget be required to include GST costs.
 - ⇒ In order to mitigate risk, it is recommended that Theiss engage sub-contractors on rates that remain fixed for the anticipated construction period.
- 5.8 At the public hearing the Committee asked the DoD whether it accepted the recommendations of the auditor. The DoD stated that it did.⁴
- 5.9 The Committee is strongly of the view that because of the high levels of uncertainty associated with remediation projects, all agencies seeking Parliamentary approval of such projects should obtain an independent audit of the projects budget.

Recommendation 3

- 5.10 **The Committee recommends in respect of future submissions relating to land remediation, that the Department of Defence and other agencies provide the Committee, in the interest of public accountability and transparency, with an independent audit of the project's budget.**

4 Evidence, p. 28.

GST

- 5.11 In its submission, the DoD did not advise the Committee whether the cost of the proposed works included or excluded any GST related costs.
- 5.12 At the public hearing, the Committee questioned the DoD as to whether the project had to account for GST costs.⁵ The DoD advised that GST costs would be refunded.⁶

Haulage of waste materials

- 5.13 The DoD proposes to transport by truck contaminated excavated material from the site to approved disposal sites. At the public hearing the Committee questioned defence whether it had considered hauling contaminated excavated material by barge and what the cost would be to remove material from the site by barge rather than by road.
- 5.14 In its submission to the Committee, the Platypus Combined Precincts Committee, argued that road haulage would significantly increase the cost estimate for the project beyond the \$16.5 million requested.⁷
- 5.15 In response to the Committee's question as to the cost of haulage by barge, the DoD advised:

I would think we would be looking at several million extra [for haulage by barge] over cost on the project. More importantly, though, from a technical point of view why we have recommended to Defence to go with trucking rather than barging is simply the environmental risks which a barging operation entails, particularly when you are dealing with contaminated materials of the type that are found on this site.

If we were to barge, we would need to barge the materials to White Bay, say, or some other location, unload the materials at that location and then put them back onto trucks for transport to landfill. ... We see that there are significant risks to the Commonwealth and to the environment from such an operation.⁸

5 Evidence, p. 29.

6 Evidence, p. 29.

7 Evidence, p. 77.

8 Evidence, pp. 29 and 30.

- 5.16 Following the public hearing, the Committee requested from the DoD an assessment of the likely costs associated with barging contaminated material from the site. Subsequently, the DoD advised the Committee that it had evaluated a number of different barging systems and reviewed the suitability of each for the application at Neutral Bay, with particular regard to the potential for spillage of contaminated material to the Harbour, and the potential for odour release at the site and barge unloading location.
- 5.17 In summary, the DoD advised that likely cost for haulage by barge would be between \$2.6 million and \$9.2 million, implying a revised estimated cost of approximately \$26.0 million for the project.⁹ The direct costs of the contaminated material disposal operation were estimated by the DoD to increase from \$46.60 per tonne, to \$80.29 per tonne as a consequence of the barging.¹⁰ Other costs included in the DoD's assessment are:
- nominal allowance for the rental of wharf space at White Bay;
 - managing contractor overheads associated with the extended duration on site;
 - additional requirements for occupational health and safety associated with the extended duration on site;
 - additional water management requirements associated with the extended duration on site; and
 - managing contractor margin.¹¹

Low density option

- 5.18 The DoD proposes a residential land use scheme for the remediated site comprising 95 dwellings and approximately 5,400m² of public space.¹²
- 5.19 The Committee found that the number of dwellings that had been approved by the LEC for the remediated site to have been a significant issue for both witnesses at the public hearing and those who made submissions.¹³

9 Exhibit 14.

10 Exhibit 14.

11 Exhibit 14.

12 Exhibit 6, p. 3.

13 See for example, Evidence, pp. 78, 84, 97, 112, 131 and 140.

5.20 The Committee notes the conclusions of Justice Sheahan of the LEC in respect to the issue:

I attach little weight to the Council's claim that the proposal is an excessive development. It is quite clear that when compared with the development adjoining it, it is certainly not excessive. Indeed, it is generally consistent with the average dwelling density in the precinct as a whole.

...

The development provides an entirely appropriate and adequate solution to the reuse of a relatively difficult site presently used for a quasi-industrial activity. The project will provide a unifying element between the existing and somewhat intrusive development of "Iora" and the waterfront below, where at the moment there is no relevant visual connection.¹⁴

5.21 At the public hearing, the Committee questioned the DoD about the cost benefit of the development proposal. Above all, what had the DoD done to look at other options, in particular, whereby profit could be maximised with a low-density residential option. The Committee also sought clarification as to whether lower density landuse would result in a lower remediation requirement.¹⁵

5.22 The DoD advised the Committee that it had considered just about every development option for the site, including small boutique hotels, high-rise apartments and high-rise towers.¹⁶ In respect to the financial viability of a proposal put forward by a witness at the public hearing, Mr Linker, for a development of 25 to 30 luxury houses, the DoD advised the Committee that it would seek someone to independently examine that proposal.

5.23 Subsequently, the DoD provided the Committee with a financial model it had obtained from independent property consulting firm, Hill PDA Pty Ltd, for a low-density residential option. The model indicated that the residual land value for the site would fall by approximately half. For the low-density option, the model assumed:

- 25 sites, at an average size of 360 square meters;
- that Defence had remediated the site; and
- that 30% of the site was dedicated for open space.

14 Exhibit 1, pp. 49 and 51.

15 Evidence, p. 143.

16 Evidence p. 143.

5.24 In respect to the whether a lower density future landuse would result in a lower remediation requirement for the site, the DoD sought the advice of the EPA accredited Site Auditor. Subsequently, the Site Auditor advised the Committee:

In assessing urban redevelopment sites, the Auditor is required to assess soils at the site against both health based investigation levels and environmental levels. The health investigation levels are contained in the NSW EPA (Environment Protection Agency) "Guidelines for the NSW Site Auditor Scheme" (1998) and the National Environment (Assessment of Site Contamination) Measure 1999. The applicable health based investigation levels are dependant on the proposed future land use, and four different land use scenarios are listed. The four different landuses can be summarised as:

- "Residential with gardens and accessible soil...". This is typically low density residential developments.
- "Residential with minimal access to soil...". This is the type of development which is proposed for the majority of the Platypus site.
- "Parks, recreational open space...". Criteria for this landuse apply to part of the proposed Platypus site redevelopment.
- "Commercial or industrial".

The most stringent health investigation levels are for "residential with gardens and accessible soil".¹⁷

5.25 The Site Auditor further advised, that based on EPA Guidelines, a lower density development would result in more stringent remediation objectives and that the concentrations of contaminants detected over the site generally exceeded even the least stringent health investigation levels.¹⁸ Consequently, the amount of remediation required would be the same or similar regardless of the future landuse.¹⁹

17 Exhibit 15.

18 Exhibit 15.

19 Exhibit 15.

Heritage issues

Introduction

- 6.1 Five places on the former *HMAS Platypus* site have been listed on the Interim List of the Register of the National Estate. These places are:
- the former Coal Bunker;
 - the former Exhauster House;
 - the former Retort House;
 - the sandstone sea wall along the waterfront of the site; and
 - the modified cliff line on the site.¹
- 6.2 The site has also been listed under various regional and local New South Wales environmental plans.² Significant European heritage exists from the former use of the site as a gasworks.³ No items of significance exist from the naval operations on the site. The entire gasworks site has been listed under the Sydney and Middle Harbour Regional Environmental Plan No. 23 and also listed in the North Sydney Local Environmental Plan.⁴
- 6.3 Items of heritage significance identified as significant in the findings of Justice Sheahan in the LEC case were:

1 Exhibit 16, p. 29.

2 Exhibit 16, p. 29.

3 Exhibit 16, p. 29.

4 Exhibit 16, p. 29.

- the Compressor House (former Exhauster House);
- the framework of the stores Building (Retort House); and
- the Bunker House (former coal store).

The Retort House

6.4 The Department of Defence (DoD) in its submission to the Committee stated that three of the five heritage items will be adaptively reused following the remediation work, these being:

- the Compressor House (former Exhauster House);
- the framework of the Stores Building (Retort House); and
- remnant Sea Wall.⁵

6.5 The structural frame of the former Retort House was manufactured in Scotland in approximately 1882, shipped to Australia and erected at Neutral Bay as part of a complete package gas-making plant.⁶ After 1940 it was stripped and refitted inside as a storage facility and continued in this use for the RAN until 2000. The Retort House is the oldest surviving structure on the site.⁷ The structure's frame is assembled using nuts and bolts, with joints specially shaped to match with each other. The heritage consultants of the DoD consider the Neutral Bay Retort House to rank as one of the last and probably most advanced of the prefabricated iron-framed buildings imported into Australia in the nineteenth century.⁸

6.6 The single-piece, hollow iron columns of the structure represent iron-casting technology at its peak.⁹ The wrought-iron roof trusses demonstrate an early proficiency with metal structures and the wrought-iron lattice girds are examples of a type of structural beam that was considered the most advanced available in the late nineteenth century.¹⁰

6.7 The Committee asked the DoD at the public hearing to elaborate on its intentions regarding the Retort House, Bunker House and Exhauster House. The DoD advised that the Retort House would be dismantled and

5 Evidence, p. 12.

6 Exhibit 18, p. 1.

7 Exhibit 18, p.1.

8 Exhibit 18, p. 1.

9 Exhibit 18, p.1.

10 Exhibit 18, p. 2.

placed in storage throughout the remediation and then be reassembled at some location on the site yet to be finally determined.¹¹ The DoD also advised that the Exhauster House will be retained in its present condition without any substantial works.¹² With respect to the Bunker House at the top of the cliff at the end of the car park, the DoD advised the Committee that it is to be entirely removed.

6.8 The Committee noted that the Australian Heritage Committee advised that the re-erection of the whole, or part of the Retort House on its original site, would assist in minimising the adverse effect resulting from the decontamination process.¹³

6.9 At the public hearing the Committee questioned the DoD whether it was true that re-erection of the Retort House on its original site was not in the prerogative of Defence to ensure. The DoD advised:

The Heritage Commission have expressed a preference that it be reassembled in its current location. That would render null and void the approvals that we have in place at the present time. It would change the format of the approval substantially. What we undertook to do, in discussion with the Heritage Commission and prior to their coming to that view, was that it be reassembled on the site precisely in a site to be determined in association with them and the future owner.¹⁴

6.10 Following the public hearing, the DoD through its heritage consultants¹⁵, advised the Committee that the approved development proposal for the site includes approval for the re-erection of the structural frame of the Retort House in the public open space area of the site, standing on the raised platform on the foreshore approximately where the RANTME administration building is presently situated.¹⁶

6.11 The DoD also advised the Committee that space constraints on the site has meant that the structural frame would not be entirely re-erected within the proposed location, that is, six of the eight bays of the frame are proposed for re-erection.¹⁷ The Committee was further advised that there are potential compensatory factors arising from this situation, including that

11 Evidence, p. 38.

12 Evidence, p. 38.

13 Evidence, p. 154.

14 Evidence, p. 39.

15 Godden Mackay Logan Pty Ltd.

16 Exhibit 18, p. 2.

17 Exhibit 18, p. 2.

excess columns from the sides may be reused to replace missing columns.¹⁸

- 6.12 The Committee notes that it is also open to the developer of the site to seek a variation to the development consent to allow for re-erection of a larger portion, or all, of the structure in another location.

The cliff line

- 6.13 The upper level of the former *HMAS Platypus* site has a length of 180 metres and width of 20 metres. This level is situated between the cliff face and the existing Iora residential development and is approximately 18 metres above the lower level of the site.
- 6.14 The cliff line on the site is a human modified topographical feature which was created by the excavation of the land adjacent to the waterfront. Its face is predominantly sandstone. The features of the face of the cliff are remnants of the operation of the gasworks and include retaining walls and patches, remnant pipes and traces of tar and other chemicals. These features are aspects of the heritage value of the cliff line. Another aspect of the cliff's heritage is its role as part of the landscaping undertaken for the creation of a waterfront industrial facility. In this context, the cliff face at Neutral Bay is representative evidence of the work performed for the operation of the former gasworks.
- 6.15 The proposed remediation of the site includes works to address contamination in the cliff. The proposed works include:
- removal of the top surfaces of the cliff line, including all materials and a proportion of the bedrock below;
 - removal of the vertical face of the cliff, including all brick, stone and concrete;
 - excavation of the bedrock of the cliff face to clean out contaminants along fault lines; and
 - excavation of the remaining bedrock to level the site.
- 6.16 The outcome of the proposed works from a heritage perspective is negative, as the physical evidence of gas making, such as seeping tar and chemical seepage will be removed.

- 6.17 The Committee notes that the Australian Heritage Commission, to which the proposed works had been referred under section 30 of the *Australian Heritage Commission Act 1975* (Cth), has advised:

The Commission therefore agrees that substantial removal of existing cliff line fabric is the only prudent and feasible alternative if decontamination of the site is necessary.¹⁹

- 6.18 Following the public hearing the Committee sought from the DoD additional information regarding the impact of the proposed remediation on the heritage significance of the cliff line. The DoD advised, through its heritage consultants²⁰, that:

After the excavations required for remediation are complete, the cliff may assume a range of profiles depending upon the extent of excavation required to remove the contaminants. ... If the excavations are finished by recreating a straight, vertical face at the rear of the site, the cliff will continue to appear as a single excavation alongside the waterfront. For this reason, the heritage values remaining (after the contaminated surfaces have been removed) will best be conserved if the remediation works produce a cliff which largely reproduces the existing faces, albeit in new locations.

Whether this new cliff face is one metre or five metres back from the present alignment is of no consequence to the heritage values of the remediated cliff. Whether there is a terrace level at three, five or twenty metres above the present ground level is also of no substantive consequence (given that the original terrace level is gone). For this reason, the excavation which is proposed so as to achieve the planned future site levels ... will not further adversely affect the heritage values of the cliff (given that one aspect of heritage significance has already been destroyed for remediation).²¹

- 6.19 In all of its reports, the Committee has given specific attention to heritage and environmental issues. These issues must continue to have priority of concern in any works proposal submitted to the Committee for consideration – they can never be an afterthought. Features of cultural and historical significance attached to public works should be, as far as practicable, preserved and bequeathed to future generations.

19 Evidence, p. 24.

20 Godden Mackay Logan Pty Ltd.

21 Exhibit 16, p. 3.

- 6.20 At times, the Committee has had some issue with how such features are assessed to be significant culturally and historically. With regard to remediation of the former *HMAS Platypus* site, the Committee experienced challenges in ascertaining how features such as retaining walls and patches, remnant pipes, traces of tar and other chemicals and the cliff's profile had captured the imagination of some in the community to the extent that they had demanded their preservation. However, the Committee expects the DoD to photograph and carefully document those features of heritage and historical value that have been identified. That should be done in consultation with the Australian Heritage Commission and the Australian National Archives.
- 6.21 With respect to the heritage values of the cliff's profile, the Committee is of the opinion that if the excavations are completed by recreating a straight vertical face at the back of the site, the cliff will continue to appear as it currently does, that is, a single excavation alongside the waterfront.

Recommendation 4

- 6.22 **The Committee recommends that the excavation of the cliff line at the former *HMAS Platypus* site proposed by Department of Defence proceed after features of heritage value, identified by Australian Heritage Commission have been photographed and appropriately documented. This should be done in consultation with the Australian Heritage Commission and the Australian National Archives.**

Recommendation 5

- 6.23 **The Committee recommends the excavation of the cliff line at the former *HMAS Platypus* site proposed by the Department of Defence proceed, to the extent that the cliff's profile reproduces the basic vertical character of the current cliff line.**

Community consultation process

Introduction

- 7.1 In its submission to the Committee, the Department of Defence (DoD) advised that land use planning for the site commenced at public meetings in November 1996 at which publicly elected members of the community were invited to join a Community Reference Group (CRG).¹ The CRG met on 14 occasions over a 12 month period culminating in the submission to North Sydney Council in December 1997 of an application seeking consent for residential development on the site.² The DoD also advised that a range of newsletters, technical planning consultations, media releases, and a site open day were arranged to keep the community informed of planning progress.³
- 7.2 The DoD intends that the community consultation program will continue throughout the demolition and remediation works.⁴ The stated objectives of the program include:
- promote environmental benefits of the clean up;
 - keep community informed of project status;
 - establish mechanisms for feedback from community; and
 - provide appropriate for community input.⁵

1 Evidence, p. 12.

2 Evidence, p. 12.

3 Evidence, p. 12.

4 Evidence, p. 13.

- 7.3 The DoD advised the Committee that its public consultation objectives will be achieved using a variety of techniques, including:
- newspaper advertisements/media releases;
 - site office open door policy and open house days;
 - attendance at local community/precinct meetings;
 - direct contact via a telephone info-line; and
 - regular briefings to Federal/State MP and local Councillors.⁶

Adequacy of consultation process

7.4 Despite the efforts of the DoD to advertise its intentions and include the community in the planning process, the Committee received evidence challenging the adequacy of the proposed consultation processes.⁷

7.5 One of the criticisms received by the Committee was that:

The PCPC (Platypus Combined Precincts Committee) notes that the mechanisms described in Paras. 44 and 45 do not include for any "action process" to correct matters of complaint and that the DEO proposes that the remediation Contractor self-regulate which actual experience shows to be totally inadequate and which therefore the PCPC opposes strenuously.⁸

7.6 The Committee noted that the DoD in its submission to the Committee gave as one of the objectives of the proposed consultation process to 'establish mechanisms for feedback from community'⁹. However, other documentation provided by the DoD to the Committee gave as an objective a complaint-response mechanism in order that complaints concerning the work can be effectively and efficiently addressed.¹⁰

7.7 The Committee is strongly of the view that it is an essential element of Defence's role in public works such as that proposed at the former *HMAS*

5 Evidence, p. 14.

6 Evidence, p. 14.

7 Evidence, pp. 77, 91 and 95.

8 Evidence, p. 77.

9 Evidence, p. 14.

10 Exhibit 13, p. 145.

Platypus site, to involve and include in the works process the wider community.

- 7.8 The Committee is strongly supportive of the establishment of a complaint-response mechanism, particularly as the works have the potential to effect the amenity of nearby residents.
- 7.9 The Committee is of the opinion that the establishment of a complaint-response mechanism would both give greater legitimacy to the agencies actions and facilitate the projects implementation and minimise community disturbance.

Recommendation 6

- 7.10 **The Committee recommends that the Department of Defence consider establishing a web site for the purposes of keeping the community informed of the project's status, promoting the benefits of the project and facilitating the project's implementation.**

Recommendation 7

- 7.11 **The Committee recommends that the Department of Defence establish a complaint-response mechanism in order that complaints concerning the proposed works can be effectively and efficiently addressed.**

The wharf

Introduction

8.1 Located on the foreshore boundary of the former *HMAS Platypus* site is a wharf of 213 metres in length and 14 metres in width.¹ The wharf structure was built in the latter part of the 1960's and is of reinforced concrete construction with timber fendering.² The wharf was constructed by the Department of Defence (DoD) on the harbour seabed and is leased from the New South Wales Waterways Authority.³

Condition of the wharf

8.2 In 1997 the DoD engaged the firm of Patterson Britton & Partners to undertake a detailed assessment of the wharf and seawall to establish:

- the current condition of the wharf and seawall;
- costs and requirements for ongoing maintenance of the wharf and seawall;
- the structural relationship between the seawall and the wharf; and
- the feasibility of structural modifications such as cutting out sections of the wharf, creating a small inlet and lowering the deck.⁴

1 Evidence, p. 8 and Exhibit 19, p. 1.

2 Exhibit 19, p. 1.

3 Evidence, p. 8.

4 Exhibit 19, p. 1.

- 8.3 In respect to the condition of the wharf and seawall and requirements for remedial work, the findings of the investigation included:
- overall, the concrete deck was found to be in reasonable conditions;
 - concrete piles have significant zones of deterioration;
 - approximately one third of the timber fender piles, wales, rubber fenders and associated steel fittings have deteriorated and should be replaced; and
 - the seawall is in generally good conditions but requires some maintenance to rectify the effects of weathering.⁵
- 8.4 The investigation estimated that the costs of repairs to the wharf and seawall at \$1.020 million.⁶ The costs for ongoing maintenance was estimated, on average, to be approximately \$33,000 per annum.⁷

Future of the wharf

- 8.5 Concerns were raised by witnesses at the public hearing about the future of the wharf at the former *HMAS Platypus* site.⁸ At the public hearing the Committee questioned Defence as to its intentions, in conjunction with the New South Wales Waterways Authority's, regarding the wharf. The DoD advised:

All I can say at this stage is that it has not been included as part of the remediation project. As far as Defence goes, it is looking at the wharf on a month-to-month basis. The state government, particularly during the Olympics, expressed a very strong desire for it to remain, even though it does not at this point in time have a future use. We have proposed a number of alternatives as to how that could exist under the New South Wales Waterways Authority. It is not something that Defence wants to maintain. It wants to get out of owning wharves around Sydney Harbour against properties it will not own.⁹

- 8.6 The DoD also advised the Committee that:

5 Exhibit 19, p. 24.

6 Exhibit 19, p. 24.

7 Exhibit 19, p. 24.

8 Evidence, pp. 82, 103 and 107.

9 Evidence, p. 150.

We have an estimate in the order of \$750,000 of the cost of doing it up [the wharf] to a condition where you could pass it on to someone. ... at the time we were in court with council, we in fact proposed a refurbishment of the wharf to bring it up to the current day's standards and then to establish a sinking fund over 20 years where the maintenance of it was something like \$50,000 a year over that time. Defence was going to set up the sinking fund, but we were asked to withdraw the application from the North Sydney Council. They did not want the long-term liability of it.

- 8.7 The Committee is of the view that the future of the wharf at former HMAS Platypus is a significant issue which has yet to be resolved by the DoD. While the Committee acknowledges that an outcome with respect to this issue is to some extent dependent on the position of the New South Wales Waterways Authority, it is of the view that the DoD is proceeding on the one hand with the development of one aspect of the site, but has yet to finalise the future of another aspect of the site.
- 8.8 The Committee is strongly of the view that the future of the wharf should be resolved as quickly as possible, in particular as it is a cost aspect that has the potential to create a significant liability for the Commonwealth. Further, the Committee agrees that a failure to resolve quickly the future of the wharf is likely to result in its demolition.

Recommendation 8

- 8.9 **The Committee recommends that the Department of Defence:**
- **continue discussions with the New South Wales Waterways Authority as to the future of the wharf at former *HMAS Platypus* with a view to resolving the issue as quickly as possible; and**
 - **provide the Committee, within 12 months, with a report detailing Department of Defence plans with respect to the future of the wharf at former *HMAS Platypus*.**

Conclusions and recommendation

- 9.1 In considering and reporting on a public work, the Committee is required by the *Public Works Committee Act 1969* to state:
- the purpose of the work and its suitability for that purpose;
 - the necessity for, or the advisability of, carrying out the work;
 - the most effective use that can be made, in the carrying out of the work, of the moneys to be expended on the work;
 - where the work purports to be of a revenue-producing character, the amount of revenue that it may reasonably be expected to produce; and
 - the present and prospective public value of the work.
- 9.2 The Committee has considered in this report, where relevant, the proposed remediation of the former *HMAS Platypus* site at Neutral Bay, Sydney, New South Wales against each of its statutory requirements.
- 9.3 On the basis of evidence presented as part of the Inquiry process, the Committee concluded that the contamination on the site is causing ongoing pollution to the Neutral Bay area and the surrounding environment and is indicative of a need for the proposed works. Further, the Committee concluded that remediation of the site may mitigate Commonwealth's liability for the contamination of the site and as such is also indicative of a need for the proposed works.
- 9.4 Further, that on the basis of evidence presented as part of the Inquiry process, the Committee concluded that the proposed works represent value for money and have the potential to maximise the revenue return to the Commonwealth from a future sale.

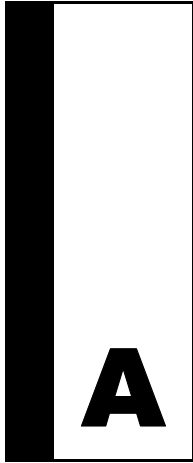
- 9.5 The Committee acknowledges that the proposed remediation will impact on the amenity of nearby residences. However, the Committee has concluded that the conditions imposed by the Land and Environment Court of New South Wales and actions the contractor would be undertaking, would, as far as is reasonably foreseeable, minimise the impact of the proposed remediation on the amenity of nearby residences.
- 9.6 The Committee notes the other objections to the proposed works, but is satisfied on the basis of evidence presented as part of the Inquiry process that the proposed works should proceed.

Recommendation 9

- 9.7 **The Committee recommends that the proposed remediation of Defence land at Neutral Bay, Sydney, New South Wales proceed at a cost of \$16.5 million.**

Hon. Judi Moylan
Chair

8 February 2001



Appendix A—Witnesses

Bain, Mr Ross, Acting Head, Defence Estate Organisation

Baker, Ms Carole (Private capacity)

Blackley, Mr Bernard, Director, Sydney Property Disposal Unit, Defence Estate Organisation, Department of Defence

Kelly, Mr Craig, Partner, Minter Ellison

Lewis, Mr Warren, Spokesperson, Platypus Combined Precincts Committee

Linker, Mr Denny (Private capacity)

Mackay, Professor Richard Gordon, Managing Director, Godden Mackay Logan Pty Ltd

Massey, Mr Peter, Environment Services Manager, North Sydney Council

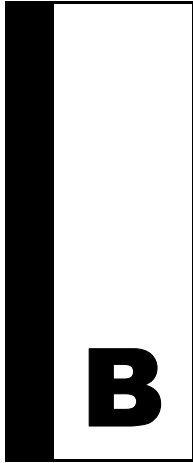
McCaffrey, Ms Genia, Mayor, North Sydney Council

McElroy, Mr Robert Lloyd, Chairperson, Iora Owners Corporation

McLelland, Mr Christopher (Private capacity)

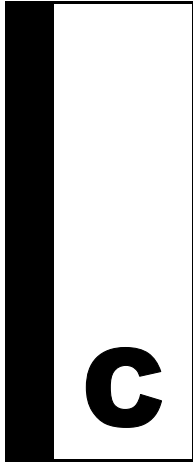
Moss, Mr Douglas William, Manager, Operations and Development, Thiess Environmental Services

Rolfe, Mr Michael Richard, Secretary, Sydney Harbour and Foreshores Committee



Appendix B—List of Submissions

1. Department of Defence
2. Australian Heritage Commission
3. Sydney Harbour and Foreshores Committee
4. North Sydney Council
5. Environment Australia
6. Iora Owners Corporation
7. Carole Baker and Danny Linker
8. Christopher McLelland
9. The Platypus Combined Precincts Committee
10. New South Wales Environment Protection Authority



Appendix C—Plan of Site and Location of Naval Structures