

Proposed contamination remediation works, former fire training area, RAAF Base Williams, Point Cook, Victoria

- 4.1 The proposed remediation on RAAF Base Williams at Point Cook, Victoria, by the Department of Defence (Defence) aims to remove soil contamination in two main areas of the former fire training area, preventing harm to human health and further pollution of Port Phillip Bay. The areas to be treated are known as Pit A and Pit B; other contaminated areas on site will be addressed in future. These future works do not form part of this proposal. The estimated cost of the project is \$27.3 million.
- 4.2 The proposal was referred to the Committee on 16 June 2011.

Conduct of the inquiry

- 4.3 The Committee received three submissions, one supplementary submission, and one confidential supplementary submission detailing the project costs. The published supplementary submission includes three documents: two lists of chemicals found on the site, and Defence's responses to questions raised by Parks Victoria (submission 2). A list of submissions can be found at Appendix A.
- 4.4 The Committee undertook a site inspection, public hearing and an in-camera hearing on the project costs on 26 July 2011 in Point Cook, Victoria.
- 4.5 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website.¹ Plans for the proposed works are detailed in Submission 1: Department of Defence.

1 <www.aph.gov.au/pwc>

Need for works

- 4.6 The Defence submission states that the works are needed in order to address a historical contamination that resulted from the previous use of the site, by Defence, as a fire-fighting training area. According to its investigations, the site contains approximately 950,000 litres of toxic liquid waste, known as *Dense Non-Aqueous Phase Liquid* or DNAPL.² Defence provided a list of some 120 chemicals found to be in this substance, included in Defence's supplementary submission, published on the Committee's website.³
- 4.7 While the DNAPL has so far remained on site (not directly in contact with the water of Port Phillip Bay), groundwater moving through the soil has dissolved some chemicals which are discharging into the Bay.⁴ A list of these 12 'contaminants of concern' was provided by Defence, included in Defence's supplementary submission and available on the Committee's website.⁵
- 4.8 As shown to the Committee during its site inspection, the present physical barrier between the DNAPL and the Bay is getting smaller, due primarily to coastal erosion. While Defence has installed an underground metal barrier to prevent the DNAPL continuing to move towards the Bay, it is imperative that the contamination be removed as soon as possible.⁶
- 4.9 While the contamination is on Commonwealth land, the Victorian Government's Environment Protection Authority (EPA) will be conducting a full audit of the decontamination works. This is not a legal requirement, because Defence intends to retain the land, but Defence has indicated that it will use the EPA audit process to provide certainty that the remediation has been fully completed.⁷
- 4.10 The Committee finds that there is a compelling and pressing need for the proposed works.

2 Submission 1, Department of Defence, p. 1.

3 <www.aph.gov.au/house/committee/pwc/raafwilliams/subs.htm>

4 Submission 1, Department of Defence, p. 1.

5 <www.aph.gov.au/house/committee/pwc/raafwilliams/subs.htm>

6 Submission 1, Department of Defence, p. 2.

7 Mr C. Trinder, Department of Defence, transcript of evidence, 26 July 2011, p. 3.

Scope of works

4.11 The proposed scope of the works is detailed in Submission 1: Department of Defence.⁸ The main technique used to remove contamination involves the removal of soil, heating it and then capturing the elements of DNAPL as they vaporise.⁹ This will all be done within the RAAF Base Williams site, on Defence-owned land. The project includes the following elements:

- 'dewatering' to allow excavation of contaminated soil and DNAPL;
- treatment of groundwater extracted during the dewatering process;
- excavation of contaminated soil and DNAPL;
- preconditioning of contaminated soil and DNAPL prior to treatment;
- treatment of the contaminated soil and DNAPL using 'thermal desorption technology';
- testing of the treated material to ensure complete remediation;
- backfilling of excavations using the treated material;
- importation of clean soil (if required); and
- rehabilitation and revegetation of the areas of the site affected by the works.¹⁰

4.12 The project would commence in February 2012 and be completed by the end of April 2013.

4.13 The Committee finds that the proposed scope of works is suitable to meet the needs of the project.

Cost of works

4.14 The total estimated out-turn cost for this project is \$27.3 million (excluding GST). The Committee received a confidential supplementary submission detailing the project costs and held an in-camera hearing with Defence on those costs.

4.15 The Committee notes that there are a significant number of Defence sites around Australia that are contaminated and will require treatment. The Committee expects that the vast majority of these sites will be much less

8 Submission 1, Department of Defence, p. 10.

9 Mr R. Tanzer, Department of Defence, transcript of evidence, 26 July 2011, p. 2.

10 Submission 1, Department of Defence, p. 10.

costly to remediate than the present project. Defence must ensure that it has properly assessed the overall remediation tasks on its Estate, and that it has budgeted accordingly to ensure that complete remediation can be undertaken on all sites.

- 4.16 The Committee is satisfied that the costings for the project provided to it are adequate.

Project issues

Risks posed by the contamination

- 4.17 According to the Department of Defence, the contamination currently poses no risk to human health or marine life.¹¹ Defence ceased using the site for fire-training in the 1980s, and it has been largely unused since that time. However, Defence could not provide a date on which the site was made entirely inaccessible, and it is possible that Defence personnel continued to use the site for other purposes until relatively recently.¹²
- 4.18 During its site inspection, the Committee could clearly see that Defence has conducted and continues to conduct considerable testing and monitoring of the site. In addition to installing a metal barrier in the soil, Defence has also fortified the existing shore line, in order to prevent further erosion of the site. However, it is patently clear that remediation works are urgently needed, to prevent damage in the future.
- 4.19 The site is in close proximity to the Point Cook coastal park and Point Cooke marine sanctuary, managed by Parks Victoria. Defence gave evidence that contaminants have reached the bay, and that contaminated groundwater has been found within five metres of the coastal park.¹³ However, the Committee accepts Defence's assurances that 'the levels [of contaminants] that have reached the bay are not at levels that are unsafe for either use of that area by the public or the environment'¹⁴.

11 Mr R. Tanzer, Department of Defence, transcript of evidence, 26 July 2011, p. 3.

12 Mr R. Tanzer, Department of Defence, transcript of evidence, 26 July 2011, p. 4.

13 Mr R. Tanzer, Department of Defence, transcript of evidence, 26 July 2011, p. 1.

14 Dr M. Bowman, Department of Defence, transcript of evidence, 26 July 2011, p. 8.

Local residents and land users

- 4.20 In its submission to the Committee, Parks Victoria raised a number of issues about the impact of the contamination and decontamination works on local land users.¹⁵ Defence has provided responses to these questions, included in Defence's supplementary submission, available on the Committee's website.¹⁶
- 4.21 The Committee is satisfied that Defence has managed the contamination risks adequately, but is concerned that neighbouring land users are not sufficiently informed of Defence's planning and management of risks arising from the contamination. Parks Victoria, for example, sought a 'copy of detailed land contamination results ... to gain a full appreciation and understanding of the potential risks to the environment and visitors to the park'.¹⁷
- 4.22 Defence must more actively engage with local land users, authorities and community groups, in order to provide confidence about the current risks posed by contamination, and its plans to remediate that contamination.
- 4.23 Defence must also provide absolute certainty that the contamination has been entirely removed. The remediation of sites such as these must be to the very highest standard, and Defence must ensure that it makes strenuous efforts to reassure local residents and park users that the site is completely safe.
- 4.24 Members of the public cannot be expected to accept minimum assurances: it is not enough to merely point to an audit report. Defence must exhaustively demonstrate that the site poses no continuing risk to human health or the environment. Failure to do so will jeopardise Defence's relationship with the local residents at Point Cook, and potentially around Australia.

15 Submission 2, Parks Victoria.

16 <www.aph.gov.au/house/committee/pwc/raafwilliams/subs.htm>

17 Submission 2, Parks Victoria, [p.4].

Recommendation 3

The Committee recommends the Department of Defence develop an information and consultation protocol for use in relation to all contaminated sites on Defence properties, to inform local residents of the extent of, and risk posed by, any proposed treatment of such contamination, regardless of when Defence plans to conduct remediation on each site.

Recommendation 4

The Committee recommends that the Department of Defence establish and maintain a website to provide information about each contaminated site, including the risks posed by the contamination, the current management of the site, and details about planned remediation.

Further works at Point Cook

- 4.25 As outlined in Defence's submission, these works (on Pits A and B) are only the most pressing instances of contamination onsite. Further contamination has been detected in Pits C, D and E and Mounds F and G. These areas will be remediated in the future.¹⁸
- 4.26 Whilst the Committee accepts Defence's assurances that these other contaminated areas are of a much lower risk to human health and the environment,¹⁹ it is important that Defence provide neighbouring land users with information about the extent of contamination and its plans for remediation. Any subsequent discovery of contamination must be immediately investigated to ascertain its extent and the danger it poses.

Contamination on other sites

- 4.27 As Defence noted during the hearing, there are 180 Defence properties in Australia where contamination has been detected.²⁰ The contamination is clearly widespread throughout the Defence Estate, with approximately 2300 individual instances of contamination across those 180 properties.

18 Submission 1, Department of Defence, p. 3.

19 Dr M. Bowman, Department of Defence, transcript of evidence, 26 July 2011, p. 6.

20 Mr C. Trinder, Department of Defence, transcript of evidence, 26 July 2011, p. 2.

- 4.28 The program to address this contamination has been in place since 2003, and the present project is the remediation project with the highest priority. Defence must ensure that, as part of the nationwide decontamination program, it conducts exhaustive consultation and information programs in each site. Local residents and land users must have absolute certainty that Defence is fully apprised of the extent of contamination, and transparently managing the risks posed by the contamination.

Committee comment

- 4.29 The Committee was impressed with the level of investigation that Defence had undertaken to determine the best solution to remediate this particular site.
- 4.30 Overall, the Committee is satisfied that this project has merit in terms of need, scope and cost.
- 4.31 Having examined the purpose, need, use, revenue and public value of the work, the Committee considers that it is expedient that the proposed works proceed.

Recommendation 5

The Committee recommends that the House of Representatives resolve, pursuant to Section 18 (7) of the *Public Works Committee Act 1969*, that it is expedient to carry out the following proposed work: Proposed contamination remediation works, former fire training area, RAAF Base Williams, Point Cook, Victoria.