Cox Peninsula Remediation Project

2.1 The Department of Finance (Finance) seeks approval from the Committee to remediate sections of the Cox Peninsula in the Northern Territory (NT).

2.2 The primary objective of the project is to implement a land remediation strategy that will address the Commonwealth’s liability that exists as a result of widespread contamination across Sections 32, 34 and 41 of the Cox Peninsula.¹

2.3 The estimated cost of the project is $31.8 million, over four years.

2.4 The project was referred to the Committee on 3 December 2014.

Conduct of the inquiry

2.5 Following referral, the inquiry was publicised on the Committee’s website and via media release.

2.6 The Committee received one submission and two supplementary submissions from Finance, one submission from the Office of the Chief Minister in the Northern Territory and one submission from the Northern Land Council (NLC). A list of submissions can be found at Appendix A.

2.7 The Committee received a briefing from Finance and conducted an on-site briefing and inspection, and public and in-camera hearings in Darwin on 22 April 2015. A transcript of the public hearing and the public submissions to the inquiry are available on the Committee’s website.²

Kenbi land claim

2.8 The Cox Peninsula is subject to an Indigenous Land Claim by the Kenbi Aboriginal People. The Kenbi Land Claim (Claim 37) was lodged in March 1979, and is the oldest unresolved land claim under the Aboriginal Land

¹ Finance, submission 1, p. 12.
² <www.aph.gov.au/pwc>
Rights (NT) Act 1976. In December 2000, the Aboriginal Land Commissioner recommended that a substantial area of the land claimed, be granted as Aboriginal Land. In January 2009, the Australian Government welcomed the in-principle agreement between the NT Government and the NLC to settle the Claim and announced that it would move to finalise outstanding issues, including the status of Australian Government facilities on the site. The remediation of the Commonwealth lands on the Cox Peninsula will allow for the final resolution of the Kenbi Land Claim.  

2.9 At the public hearing the Committee heard that:

…it remains the Northern Land Council’s preferred position that the Commonwealth transfer the land as soon as possible to the Kenbi Land Trust. The Trust would then be able to grant a lease back to the Commonwealth over those areas of land which need remediation.

2.10 Finance responded to this by stating:

There are a range of reasons why it is certainly our preference—and I think it is now the agreed position—that the remediation of particular areas of section 32 and section 34 take place before those areas are transferred. Just to be clear, that does not mean that none of section 32 or section 34 will be transferred prior to all of the remediation being complete. There is certainly scope for the greater part of section 32… over 90 per cent [to] be transferred on settlement of the claim, with a small portion of the site not transferred until the remediation is complete there. On section 34, similarly, while the contaminated area is larger than it is on section 32, there is scope for some areas of section 34 to be transferred at the time of the settlement and for the Commonwealth to continue owning those until the remediation is complete. I understand that that position has been much discussed in consultations with the various stakeholders, and I understand that it is now a position that all of the parties are comfortable with.

**Need for the works**

2.11 The Commonwealth has utilised 4,750 hectares of land on the Cox Peninsula for maritime, communications and Defence purposes for 70 years, resulting in extensive contamination across a wide area both below

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3 Finance, submission 1, p. 12.
4 Ms Leanne Liddle, Northern Land Council, transcript of evidence, 22 April 2015, p. 12.
5 Mr John Edge, Finance, transcript of evidence, 22 April 2015, p. 10.
and at ground level. Asbestos is widespread and pesticides, heavy metals and polychlorinated biphenyls (PCBs) have been detected above safe levels at a number of sites on Cox Peninsula. This presents a potential health risk to site users and the local community.\(^6\)

2.12 Without substantial remedial works, there is a risk that in-ground contamination will migrate further and will impact local bore water. The quality of the water across much of the Peninsula is such that future extraction and use of this resource (such as for drinking water) cannot be ruled out. Therefore, its contamination represents a liability if left unmanaged and allowed to migrate from the identified sources. Interaction of the groundwater and ephemeral surface water bodies, such as the wetlands (and associated ecosystems) in Section 32 is another potential impact if contamination is not managed in the near future. Some of this bore water provides the only drinking water supply to the population of the Wagait township, the largest permanent community on the Peninsula.\(^7\)

2.13 During the site inspection, the Committee saw the need for remediation firsthand, as evidenced by remote tip sites, several different types of concrete footings covering hazardous material and shipping containers used to securely store bagged material containing asbestos.

2.14 The Committee is satisfied that the need for the work exists.

**Previous works**

2.15 A remediation program was attempted in 2010 to target areas of contamination across Section 34. Works were completed in and around the compound at Section 34 to remove materials around former underground and above ground storage tanks and to remove waste and asbestos materials from tip site areas.\(^8\)

2.16 Large volumes of scrap metal waste and contaminated soils were removed from the site, and significant quantities of asbestos containing materials were buried in temporary earth-covered mounds. However, due to greater volumes of waste being identified than originally estimated, project cost escalated and the timeframe for remedial activities were projected to extend beyond the end of the 2010 dry season. As a result, the remediation program was concluded at the end of the 2010 dry season and temporary controls and measures were adopted to manage risks relating to materials that had been excavated and screened. These temporary controls and

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\(^6\) Finance, submission 1, p. 6.

\(^7\) Finance, submission 1, p. 7.

\(^8\) Finance, submission 1, p. 16.
measures included placing asbestos contaminated materials in bags and storing these in buildings within the Section 34 compound. It was recognised that future remediation works would need to address large areas of the site that were not remediated as part of the 2010 program and that the asbestos bags and buried asbestos waste would need to be managed appropriately.\(^9\)

### 2.17 A Risk Mitigation Project, considered by the Committee as a Medium Work, commenced in June 2014. Work focused on taking advantage of the dry season to remove or relocate contaminants prior to the next wet season.\(^10\)

**Options considered**

2.18 Over 20 remediation options were assessed initially at the ‘screen’ stage, with two remediation options identified as providing value for money while significantly addressing the public risk of exposure to asbestos. These two options were:

- On-site containment of waste materials – whereby contaminated material be disposed of in an engineered sealed ‘containment cell’ on Commonwealth land within the existing industrial compound on Section 34 and for appropriate non-contaminated material be recycled where suitable, and
- Off-site disposal of waste materials – transport of contaminated material to a facility or facilities licenced to receive the particular type of contaminated material.\(^11\)

2.19 Both of these options were compared against the base case “do nothing” option. A robust technical feasibility assessment of the two remediation options was undertaken with the options then assessed against the agreed assessment criteria that were developed in consultation with key stakeholder groups. In summary the following analysis was undertaken:

- Identification of remediation technologies and waste management strategies available;
- Preliminary screening assessment of potential options for technical and implementation feasibility and capability for meeting the rehabilitation criteria;
- Development and description of feasible remediation and management strategies available for the site;

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\(^9\) Finance, submission 1, p. 16.  
\(^10\) Finance, submission 1, p. 17.  
\(^11\) Finance, submission 1, p. 21.
Application of a robust multi-criteria analysis of potential options, using the outputs of stakeholder;  
Consultation and engagement process and site contamination and waste investigations; and  
Identification and development of preferred remediation and/or management strategies.\(^\text{12}\)

2.20 Both the off-site and on-site remediation options met many of the key evaluation criteria, whilst meeting the agreed remediation targets of open space and commercial/industrial use.\(^\text{13}\)

2.21 The on-site containment cell option was considered a superior option for the following reasons:  
The cost is significantly less ($7.2 million lower) than the alternative;  
The environmental impact is reduced with fewer truck movements through the neighbouring communities and a significantly reduced carbon footprint;  
The option allows for the management of materials on-site which provides greater opportunities for Indigenous participation during construction due to a larger proportion of the works involving material tracking and management on site;  
Demonstrates industry best practice for a remediation project in limiting the disposal of wastes by effectively managing materials on site;  
The ongoing environmental controls in the Section 34 compound will provide employment opportunities for Indigenous groups;  
Provides a solution that can be staged to facilitate the progressive transfer of land;  
Allows for upgrade works at the Wagait Shire Tip to improve waste management operations and reduce any potential impact on the adjacent wetland and Savannah areas;  
Provides for an administrative building in the Section 34 compound to support ongoing land management, training and environmental monitoring activities; and  
Provides enhanced ongoing land management opportunities for Traditional Owners.\(^\text{14}\)

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\(^\text{12}\) Finance, submission 1, p. 21.  
\(^\text{13}\) Finance, submission 1, p. 21.  
\(^\text{14}\) Finance, submission 1, p. 22.
2.22 The Committee found that Finance has considered a range of options to deliver the project and has selected the most suitable option.

**Scope of the works**

2.23 The remediation project is not simply an extension of the previously undertaken risk mitigation works. It is a much larger project that will remove contaminants as much as practicable and ensure the site is able to be used in line with future use aspirations.\(^\text{15}\)

2.24 In line with the chosen option, a containment cell will be built as follows:

- The 74 metre x 74 metre cell will be excavated to a depth of 8 metres below ground level (taking note of local seasonal groundwater levels);
- The cell will be lined with an impermeable geosynthetic clay liner (GCL);
- The encapsulated material will be capped with a GCL to minimise surface water ingress into the cell, thereby reducing rates of leachate generation;
- The cell will incorporate provisions for venting of accumulated gas including a gas collection layer and landfill gas venting wells;
- The cell will be contoured to encourage surface water runoff towards the edges;
- As some water may still permeate through the GCL cap over time, a drainage layer will be placed immediately on top of this liner to further promote lateral movement of surface water towards the edges of the cell; and
- Since it may not be possible to eliminate surface water ingress and leachate generation entirely, the cell will also incorporate a leachate collection system.\(^\text{16}\)

**Location of the containment cell**

2.25 The current Section 34 compound has been selected as the preferred location for the containment cell for the following reasons:

- Proximity to the most significant tip sites (Tip Site 1/1A, Tip Site 2 and Tip Site 3) and other sources of waste (Section 34 compound). This reduces both transport distances and associated costs, and risks associated with the movement of soils impacted by hazardous materials (particularly fibrous asbestos);

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\(^\text{15}\) Finance, submission 1, p. 17.

\(^\text{16}\) Finance, submission 1, p. 23.
The site is located within an area that has been disturbed previously. As such, the need for extensive native vegetation clearance will be minimised;

The presence of an existing roadway provides good access to the containment cell during construction, filling and capping of the cell;

The Section 34 compound has been identified as an area that may be zoned in the future for commercial/industrial use. This future use is compatible with the placement of a containment cell;

The Section 34 compound represents the preferred location for a transfer station for the sorting and pre-treatment of material at the site prior to either off-site disposal or containment. As such, the location of the containment cell nearby makes practical sense; and

The observed soil profile and groundwater levels at the nominated location are considered suitable for the construction of a containment cell. Similarly, the area is also largely flat.\(^17\)

2.26 At the public hearing, Mr Jolly, a member of the public with several years’ experience in assessing groundwater on the Cox Peninsula, alerted the Committee to a possible problem with the selected site.

…underneath section 34 we did investigation drilling, and bores capable of producing 10 to 20 litres per second of potable water were intersected at depth. The containment cell is proposed to be located right on top of where that bore field would be located.\(^18\)

2.27 Further to this, in a response to the matter from Finance the Committee was assured that the geology of the site reduces the risk of leachate from the containment cell contaminating the water source.\(^19\)

2.28 Additionally, several strategies have been identified to manage and mitigate any risk of contamination:

- only treated and non-leachable material will be placed in the containment cell;
- the containment cell is designed to be covered with an impervious layer and hardstand to reduce the potential for surface water infiltration;
- at least ten groundwater wells on s.34 will be located around the containment cell for the ongoing monitoring and testing of the aquifer;
- all leachates will be removed from the site and disposed of;

\(^17\) Finance, submission 1, pp. 25-26.
\(^18\) Mr Peter Jolly, private individual, transcript of evidence, 22 April 2015, p. 21.
\(^19\) Finance, submission 1.2, p. 3.
remediation will not be complete until there is independent site auditor sign off;

and 20 years of regular post-project monitoring and testing will be conducted to observe water quality.20

2.29 The Committee is satisfied that the selected site for the containment cell is the appropriate option.

Seasonal considerations

2.30 Subject to Parliamentary approval of the project, construction is expected to commence as soon as possible and conclude by June 2018, with a defects and liability period extending for 12 months from commissioning.21

2.31 The wet season in the NT generally occurs from October-April each year so remediation works at Cox Peninsula will generally be completed between April and October in any given year.22

2.32 At the public hearing, the Committee heard that:

…the containment cell can be actually constructed in two stages. The first stage would be available for the first dry season, then we can close it off during the wet season and then construct the second stage of the containment cell for that second stage of the works.23

2.33 The Committee finds that the proposed scope of works is suitable for the works to meet its purpose.

Cost of the works

2.34 The estimated cost of the project is $31.8 million, over four years. Approved funding is $16.0 million in financial year 2014-15, $12.0 million in financial year 2015-16 and $3.5 million in financial year 2016-17. Operating costs are not included but will be absorbed by Finance in future.24

2.35 Finance provided further detail on the project costs in the confidential submission and during the in-camera hearing.
2.36 The Committee considers that the cost estimates for the project have been adequately assessed by Finance and the Committee is satisfied that the proposed expenditure is cost effective. As the project will not be revenue generating the Committee makes no comment in relation to this matter.

Opportunities for Indigenous participation

2.37 The Kenbi Ranger Group has been employed through the Commonwealth’s ‘Caring for our Country Program’ to provide comprehensive conservation and land management activities on the Cox Peninsula. Recent risk mitigation works have utilised the Kenbi Rangers for security, transport and labour services. Part of the mitigation works also includes a pilot vegetation regeneration project, which the Kenbi Rangers have been contracted to manage.  

2.38 At the public hearing, the Committee heard that Indigenous groups are keen to participate. Ms Liddle from the Northern Land Council said:

> I would be disappointed if people did not extend some of the opportunities for surveying, for people to work in the remediation work – not just ranger work, but beyond that in scientific roles. There is a wealth of Aboriginal people out there looking for work in this area of expertise who could be mentored into these areas.

2.39 Following this, Mr Risk, a local small business owner stated:

> …my understanding is that there is going to be a large contractor come in, and he will be deemed as the contractor, and then you will have subcontractors that are brought in under them to complete the scope of works. It is at that level that I could see Larrakia businesses—small to medium—being able to use the time in the remote remediation process to develop and grow. They would then be on a much more level footing to be able to compete in the larger market.

Committee comments

2.40 The Committee notes the opportunities for Indigenous participation and employment in the remediation project, and encourages Finance to make a range of employment and training positions available to local Indigenous residents where possible.

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26 Ms Leanne Liddle, Northern Land Council, transcript of evidence, 22 April 2015, p. 15.
27 Mr William Risk, private individual, transcript of evidence, 22 April 2015, p. 22.
The Committee is aware that a culturally sacred site is nearby a proposed works site. It accepts Finance’s assurances that it is working closely with the Aboriginal Areas Protection Authority to ensure adequate protection and respect is shown.\(^\text{28}\)

The successful remediation of sites on the Cox Peninsula is crucial to final resolution of the Kenbi Land Claim. Nevertheless, the Committee understands there is scope for transfer of a significant portion of the land to the traditional owners prior to the completion of remediation.

The Committee accepts Finance’s assurances that the land will be remediated to industry standards.\(^\text{29}\) The Committee expects Finance to report annually on key milestones including progress and expenditure to date. Additionally the Committee would be pleased to receive information on Indigenous employment associated with the project and feedback from the community on any matter arising.

### Recommendation 1

**2.44** The Committee requires the Department of Finance to provide progress reports to the Committee on an annual basis.

**2.45** The Committee commends staff from the Department of Finance and the Department of the Prime Minister and Cabinet who demonstrated throughout this inquiry that they have invested substantial effort over a long period to achieve the best outcome for the local community. This was particularly apparent while showing the Committee the site. The Committee was also impressed by the level of co-operation demonstrated between staff from both departments.

**2.46** The Committee did not identify any issues of concern with Finance’s proposal and is satisfied that the project has merit in terms of need, scope and cost.

**2.47** Proponent agencies must notify the Committee of any changes to the project scope, time, cost, function or design. The Committee also requires that a post-implementation report be provided within three months of completion of the project. A report template can be found on the Committee’s website.

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

**Recommendation 2**

2.49 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: Cox Peninsula Remediation Project.