




Australian Government

Department of Defence  
Defence Support Group

**Supp. Submission No. 1.2**

 (RAAF Williams)  
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26/7/2011

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**Janelle Saffin MP**  
**Chair**  
**Parliamentary Standing Committee on Public Works**  
**Parliament House**  
**CANBERRA ACT 2600**

Dear Madam Chair

**Defence Response to Parks Victoria Submission to the Public Works Committee on the Contamination Remediation Works Former Fire Training Area, RAAF Base Williams, Point Cook, Victoria**

Defence welcomes the Submission from Parks Victoria in relation to the Contamination Remediation Works at the former Fire Training Area at RAAF Base Williams, Point Cook.

Defence has an enduring and productive working relationship with Parks Victoria in relation to land management issues associated with the Defence Base and the adjacent Coastal Park. Defence notes and appreciates Parks Victoria full support of the remediation efforts being made. On the 19th of July, the Defence project team met with representatives from Parks Victoria and held very positive discussions addressing the questions raised in the Parks Victoria submission.

Defence is pleased to provide the following responses for the Committees information to the questions raised in the Parks Victoria submission.

***1. Proposed remediation methodology***

***Question 1.1. The proposed methodology to remediate the site (i.e. Thermal Desorption Technology) looks sound and of low risk. Due to the past activities of the burn pits, there is every chance that other contaminants will be encountered that will not be able to be treated using this methodology – e.g. heavy metals.***

Defence response: Defence is aware of the large number of contaminants including metals, in soil and groundwater at the former Fire Training Area (FTA). Excavation, screening for metals followed by ex-situ desorption of the former FTA is expected to remediate the area to a level which reduces Defence's ongoing liability in relation to the site; will satisfy the Victorian EPA that the risks regarding protection of human health and the environment have been addressed and will allow the area to be used for Defence training activities as required.

The preferred remedial option of excavation and Thermal Desorption was in part selected because it provides the greatest level of control over the treated product. Following treatment of the contaminated material, stockpile testing will be conducted to ensure any materials retained onsite is safe to leave in place and residual contaminants will not migrate into the Bay. This testing will be done in strict accordance with cleanup objectives agreed to by the Victorian Environment Protection Authority appointed Statutory Contaminated Sites Auditor. Following the remediation activity, at least two years of groundwater monitoring will be conducted to ensure no release of contaminants from the remediation occur to the environment. Specific plans for materials tracking, management and site cleanup goals will be developed once a contract for the works is awarded.

Defence will then undertake direct consultation with Parks Victoria on these issues.

***Question 1.2. With regard to the above point, are there any heavy metals (e.g. lead) or other inorganic contaminants in the contaminated area that are of concern, and how will they be treated?***

Defence Response: There are likely to be metals present. These will be screened out from soil prior to the proposed treatment methodology. Please refer to the Defence response to Question 1.1.

***Question 1.3. What measures will be in place to ensure the "treated material" is suitable to be used as backfill - assuming back to the site it was removed from?***

Defence response: Specific plans for materials tracking, management and site cleanup goals will be developed once a contract for the works is awarded. The entire process will be subjected to an independent environmental audit agreed with the Victorian EPA. Defence

will undertake direct consultation with Parks Victoria on these issues as the proposed project progresses.

***Question 1.4. There has been little detail to explain how the groundwater is to be treated. This should be provided, particularly as this poses an environmental risk to the Marine Sanctuary and may have potentially contaminated the lake. How is this issue of contamination leaching into the marine sanctuary being considered?***

Defence response: The works are expected to capture and treat the mass of Dense Non-Aqueous Phase Liquid (DNAPL) contaminate within the two plumes that have been identified from the former FTA Pits A and B. Groundwater removed during excavations will be treated onsite and/or taken to an offsite licensed liquid waste treatment plant. Specific plans for waste water management will be developed once a contract for the works is awarded. Defence will undertake direct consultation with Parks Victoria on these issues.

***Question 1.5. What are the potential risks to park visitors and staff at current levels of contamination and during the remediation process? Will Parks Victoria receive a risk management strategy for the proposed remediation process?***

Defence response: The Human Health Risk Assessment conducted for the site and endorsed by the Victorian EPA Appointed Auditor found no risk to visitors and staff from the current condition of the former FTA or the foreshore. Any remediation of the site will only proceed in full compliance with all occupational health and safety obligations that will ensure the risks to people and the environment are strictly managed.

Defence is aware through direct discussions with Parks Victoria of the public and staff use of the adjacent coastal park and will ensure planning and the remediation system ensures any risks to people using the coastal park are directly addressed and appropriately managed. Defence will engage further with Parks Victoria to communicate the outcome of this planning and during the works.

***Question 1.6. What level of noise will the remediation process generate? The Point Cook Coastal Park main visitor node is only 400m away, so will there be a risk of noise pollution?***

Defence response: Any works contractor will be required to develop a noise management plan in accordance with the appropriate Victorian industrial standards. The development and implementation of this plan will be discussed with Parks Victoria to ensure potential impacts on birdlife are appropriately managed.

***Question 1.7. Has there been any consideration to what effect the noise and lighting during the remediation process may have on the birdlife?***

Defence response: Defence is aware that the effect of noise on a range of potentially sensitive receptors will have to be considered as part of the proposed project. Please refer to the Defence response to Question 1.6.

***Question 1.8. What is the risk of escaping dust particles during remediation, and will there be consideration to wind direction and the increased risk of park visitors being exposed?***

Defence response: Defence will ensure that any successful tenderer's Construction and Environment Management Plan addresses all dust and vapour exposure risks associated with the works. These issues are also critically important to ensuring worker protection on the site, not just in the adjacent coastal park. Thermal desorption plants have sophisticated emissions treatment and testing systems to ensure discharge to the environment meets workplace safety and environment standards. The excavations will also have emissions monitoring and vapour capture systems. Thermal desorption projects are currently occurring in Sydney in residential areas. These issues can be safely managed. Defence will engage further with Parks Victoria to communicate the outcome of this planning and during the works.

***2. General Issues in Relation to the Site***

***Question 2.1. Are there any other contaminated areas on the RAAF Base that pose a risk to the surrounding environment and are these being adequately managed?***

Defence response: Defence has conducted extensive testing on other areas of the base and these tests have not indicated that other areas pose any significant risks of impact on the environment or human health. Defence conducts routine monitoring of groundwater around the base and also in the vicinity of the fire training area. Defence has agreed to provide information on the groundwater monitoring to Parks Victoria. Other minor remediation

works associated with the fuel storage area occurred on the base in 2007 and no significant contamination impacts were detected.

***Question 2.2. Has the lake been tested for contamination, and if there is contamination present, what are the implications and risks?***

Defence response: Defence has not recently tested the water in the Lake for evidence of contamination. Monitoring wells between the Lake and former FTA show that the contamination in the FTA will not reach the Lake in any of the scenarios that could be realistically contemplated. Acting to remediate the former FTA will remove even the remote possibility that this could occur. Defence will undertake to monitor the lake during remediation works and share this data with Parks Victoria.

***Question 2.3. The coastline has been experiencing significant erosion which may pose a risk of contamination entering the bay via the groundwater.***

Defence response: Defence will shortly complete an unrelated shoreline stabilisation works project which should ensure sufficient time for the remediation works to be completed.

***Question 2.4. There has been significant rainfall over the past year, which may have accelerated the movement of contamination in the groundwater. Has there been any testing to monitor this?***

Defence response: Defence will receive the latest routine groundwater monitoring data from the fire training area in early August. Defence has already offered to communicate the results of this testing to Parks Victoria.

***Question 2.5. Due to the significant contamination, the boundary fence separating Point Cook Coastal Park will require some repair work and possible extension further into the Bay to prevent visitors from entering the site.***

Defence response: The works contractor will install temporary fencing during the works to further restrict access. In an unrelated project Defence has recently also installed a permanent new airfield security fence adjacent to the northern boundary of the former FTA. This fence will assist in restricting unauthorised access.

***3. More Information Required***

***Question 3.1. It would be informative for Parks Victoria to have a copy of detailed land contamination results for the Fire Training Area to gain a full appreciation and understanding of the potential risks to the environment and visitors to the park.***

Defence response: Defence has provided the Human Health Risk Assessment and Ecological Risk Assessment to the Victorian EPA and received its endorsement. While Defence has no objection to providing these studies separately to Parks Victoria, Defence understands that responsibility and expertise in contamination remediation rests with the Victorian EPA. Defence suggests that Parks Victoria consult within their portfolio with the EPA so that the context of the proposal is effectively understood and lines of communication with Defence do not become confused. Defence is more than willing to provide briefings and materials to Parks Victoria to assist in it gaining a full appreciation of the proposed project. The key message remains that contamination effects are limited to the Defence site.

***Question 3.2. To assist in commenting on the environmental risk it would also be of benefit to be provided a copy of any monitoring results (sediment and water quality) that show the degree of impact of contaminants migrating from the site to the surrounding environment. It is documented that contamination was located 5m from the park boundary, which raises concerns that it may have entered the park***

Defence response: Defence has no information indicating that any Victorian Parks land adjacent to the Defence property may have been effected and cannot therefore provide any monitoring results. The proposed remediation works will target the most highly contaminated areas. Areas immediately adjacent to the Parks Victoria property boundary are not impacted by the proposed works.

I trust this information assists the Committee. I look forward to the opportunity to discuss any of the issues raised by Parks Victoria directly with you at the Public Hearing.

Yours sincerely,

Richard Tanzer

Acting Director General Infrastructure Asset Development

Infrastructure Division

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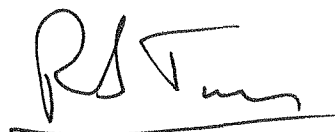
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22 July 2011

  
26/7/2011

2. Over 120 compounds have been identified at the area, including 12 key contaminants of concern to environment protection regulators. These combined compounds have created a viscous product known as Dense Non Aqueous Phase Liquid or DNAPL.
3. Potential contaminants of concern at Point Cook are:
  - Tetrachloroethene ✓
  - Trichloroethene
  - 1,1,2-trichloroethane
  - 1,2-dichloroethane
  - 1,2,2,2 tetrachloroethane
  - 1,1,-dichloroethane
  - Vinyl chloride
  - Benzene
  - Chlorobenzene ✓
  - Chloroform
  - Cis-1,2-dichloroethane
  - Trans 1,2-dichloroethane
4. The DNAPL itself is relatively stable due to its viscous nature and is migrating only very slowly toward Port Phillip Bay.



20/7/2011  
received

Compound
1,1,1,2-tetrachloroethane
1,1,1-trichloroethane
1,1,2,2-tetrachloroethane
1,1,2-trichloroethane
1,1-dichloroethane
1,1-dichloroethene
1,2,3-trichlorobenzene
1,2,3-trichloropropane
1,2,4,5-tetrachlorobenzene
1,2,4-trichlorobenzene
1,2,4-trichlorobenzene
1,2,4-trimethylbenzene
1,2-dibromoethane
1,2-dichlorobenzene
1,2-dichlorobenzene
1,2-dichloroethane
1,2-dichloropropane
1,3,5-trimethylbenzene
1,3-dichlorobenzene
1,3-dichlorobenzene
1,3-dichloropropane
1,4-dichlorobenzene
1,4-dichlorobenzene
1-naphthylamine
2,3,4,6-tetrachlorophenol
2,4,5-trichlorophenol
2,4,6-trichlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
2,4-Dinitrotoluene
2,6-dichlorophenol
2,6-dinitrotoluene
2-butanone (MEK)
2-chloronaphthalene
2-chlorophenol
2-methylnaphthalene
2-methylphenol
2-naphthylamine
2-nitrophenol
3-&4-methylphenol
3-methylcholanthrene
3-nitroaniline
1-(dimethylamino) azobenzene
1,4-DDE
1-aminobiphenyl
1-bromophenyl phenyl ether
1-chloro-3-methylphenol
1-chlorophenyl phenyl ether
1-chlorotoluene
1-methyl-2-pentanone (MIBK)
1,12-dimethylbenz(a)anthracene

Compound	Pa
a-BHC	
Acenaphthene	
Acenaphthylene	
Acetophenone	
Aldrin	
Aniline	
Anthracene	
b-BHC	
Benz(a)anthracene	
Benzene	
Benzo(a) pyrene	
Benzo(g,h,i)perylene	
Bis(2-chloroethoxy) methane	
Bis(2-chloroisopropyl) ether	
Bis(2-ethylhexyl) phthalate	
Bromobenzene	
Bromodichloromethane	
Bromoform	
Bromomethane	
Butyl benzyl phthalate	
Carbon disulfide	
Carbon tetrachloride	
Chlorobenzene	
Chlorodibromomethane	
Chloroethane	
Chloroform	
Chloromethane	
Chrysene	
cis-1,2-dichloroethene	
cis-1,3-dichloropropene	
d-BHC	
DDD	
DDT	
Dibenz(a,h)anthracene	
Dibenzofuran	
Dibromomethane	
Dichlorodifluoromethane	<
Dieldrin	.
Diethylphthalate	.
Dimethyl phthalate	.
Di-n-butyl phthalate	.
Di-n-octyl phthalate	.
Diphenylamine	.
Endosulfan I	.
Endosulfan II	.
Endosulfan sulphate	.
Endrin	.
Endrin aldehyde	.
Endrin ketone	.



Compound
Ethylbenzene
Fluoranthene
Fluorene
g-BHC (Lindane)
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-c,d)pyrene
Isopropylbenzene
Methoxychlor
Naphthalene
Naphthalene
Nitrobenzene
N-nitrosodi-n-butylamine
N-nitrosodi-n-propylamine
N-nitrosopiperidine
Pentachlorobenzene
Pentachloronitrobenzene
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Styrene
TCE
Tetrachloroethene
Toluene
TPH C 6 - C 9 Fraction
TPH C10 - C14 Fraction
TPH C15-C28 Fraction
TPH C29-C36 Fraction
trans-1,2-dichloroethene
trans-1,3-dichloropropene
Trichlorofluoromethane
Vinyl acetate
Vinyl chloride