

Chapter 2

Army Aviation Centre Oakey and RAAF Base Williamtown revisited

Introduction

2.1 Army Aviation Centre Oakey (AACO), which is situated 30 kilometres west of Toowoomba, provides a training establishment for Australian Army Aviation including the Army Helicopter School. While the airfield is military controlled and regulated, a small civil terminal has been maintained. Originally established in 1943 as a RAAF base serving as a maintenance depot for the RAAF base at Amberley, the Army assumed responsibility for the base in 1969 and developed the facility as an Army Aviation training base under the responsibility of 1st Aviation Regiment which had its headquarters in Oakey until 2005.¹

2.2 This chapter will provide an overview of the contamination at AACO, including a brief timeline of events, the impacts on the effected community and the response of Commonwealth and Queensland governments. It concludes with the committee's findings and recommendations.

Use of firefighting foams at Army Aviation Centre Oakey

2.3 Evidence provided by Defence's environmental consultant, AECOM, as summarised by Shine Lawyers, reveals that the use of 3M Aqueous Film Forming Foam (AFFF) at the base may have started in the mid-1970s with the introduction of Oshkosh fire engines which were specifically designed to handle the product.²

2.4 It is estimated that from 1977 to 2003 a total volume of approximately 1.2 megalitres of AFFF concentrate was discharged at the base, largely in firefighting drills. Activities at the base resulting in the discharge of firefighting foam included:

- daily training events resulting in the discharge of AFFF on a grassy area at the rear of the base fire station;
- major fire training exercises at least once a month which involved fire engines attending simulated aircraft crashes at random locations on the base and drenching mock aircraft with AFFF;
- building fire tests involving discharges of AFFF; and
- infrequent discharges of AFFF in actual emergency situations.³

2.5 As a result of the use of AFFF at AACO over a 25 year period, it is certain that the contaminants have permeated the ground at or near where it was discharged; flowed into the surrounding water catchment areas and Oakey Creek; and entered the

1 Shine Lawyers, *Submission 88*, p. 4.

2 Shine Lawyers, *Submission 88*, p. 5.

3 Shine Lawyers, *Submission 88*, p. 5.

groundwater beneath the base and beneath surrounding properties.⁴ (Detection area maps for both PFOS and PFOA are included at Appendix 5.) The Shine Lawyers submission noted that Defence had advised that:

...the contamination affects an area in the order of 24 square kilometres at Oakey. The affected area includes much private irrigation and grazing land and captures several hundred private water bores and several kilometres of Oakey Creek traversing private property.⁵

Timeline summary

2.6 Initial routine environmental investigations into potential hydrocarbon contamination at AACO undertaken in 2010 were followed by more comprehensive investigations in 2011. According to the Defence submission, these investigations identified the presence of PFOS and PFOA within soil and groundwater:

Progressive investigation and assessment activities to determine the extent of contamination, identify potential receptors and pathways, and assess the risks to human health and the environment, have continued at properties both on and off the Army Aviation Centre Oakey.⁶

2.7 Further assessments indicated the contamination had travelled beyond the AACO. Defence completed limited targeted water sampling in early 2013. Wider scale testing beyond the AACO perimeter occurred from early 2014 as part of the evolving process to determine the extent of the impact. However, it appears that Defence was aware of the potential for firefighting foam contamination at AACO as early as 2005 following an investigation specific to Oakey carried out by Sinclair Knight Merz.⁷

2.8 The Toowoomba Regional Council (TRC) advised the committee that the Council's Manager of Water Operations, Mr John Mills, attended a neighbourhood information session at AACO on 13 December 2012 which identified localised contamination of ground water in areas contained within the base.⁸ A small number of property owners neighbouring the base were also present at that session.⁹ Mr Mills told the committee:

I was at an information session that I was invited to. At that time, the information was reasonably limited. I think there had been a number of tests done in association with what was going on [at] the Army base. It would have appeared that the plume was moving in a slightly different

4 Shine Lawyers, *Submission 88*, p. 6.

5 Shine Lawyers, *Submission 88*, p. 8.

6 Department of Defence, *Submission 87*, p. 24.

7 Shine Lawyers, *Submission 88*, pp 6–7.

8 Toowoomba Regional Council, *Submission 115*, p. 1.

9 Shine Lawyers, *Submission 88*, p. 7.

direction from where it is known to be moving now, which was moving away from our stuff.¹⁰

2.9 On 9 May 2014, Council was advised by Mr Mark O'Connell, Base Support Manager Darling Downs, Defence Support Organisation, of potential ground water impacts affecting the aquifer and TRC bore fields and requested permission to access TRC bores for sampling. The sampling carried out by Parsons Brinkerhoff and later by AECOM indicated that perfluoroalkyl substance (PFAS) contamination extended from close to AACO to Council's bore 3 (at the gatehouse), and bores 7 and 8 (in the showgrounds). Bores 5 and 6, which are located on the road towards the abattoir, were not contaminated. The Council submission noted that PFAS contamination originating from AACO had been migrating through the aquifer.¹¹

2.10 Mr O'Connell subsequently wrote to Council on 14 July 2014 advising of the test results: 'As a precaution Defence recommends not drinking water from any underground sources within the investigation area until further notice'.¹² The Council submission also noted that in August 2014 Defence had provided Council with reports of investigations that had been conducted dating back to 2011.¹³

2.11 For those within the investigation area, Defence provided the following advice:

As a precaution, Defence recommends not drinking water from any underground sources (i.e. bore water) within the investigation area, until further notice. This includes boiled groundwater.

Landholders or residents within the investigation area, whose only source of drinking water is groundwater, should contact the project team in order to discuss possible management strategies. Each household's drinking water requirements will be assessed on a case-by-case basis, to determine the most appropriate assistance that Defence may be able to provide.

Defence does not have any information which indicates that using groundwater for irrigation of crops and watering livestock should cease.

Should additional information, to be gathered through Defence's ongoing investigations, change this position, landholders and residents will immediately be informed.

Defence will continue to work cooperatively with all relevant stakeholders including those from Commonwealth, State and local government agencies to ensure appropriate management strategies are implemented.¹⁴

10 Mr John Mills, Manager Water Operations, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 4.

11 Toowoomba Regional Council, *Submission 115*, p. 2.

12 Toowoomba Regional Council, *Submission 115*, p. 1.

13 Toowoomba Regional Council, *Submission 115*, p. 2.

14 Defence, 'Oakey – Army Aviation Centre – Groundwater Investigation Project', available at: <http://www.defence.gov.au/id/oakey/Default.asp> (accessed 2 December 2015).

2.12 Shine Lawyers has played a prominent role assisting 51 residents and business people from Oakey in their dealings with the Department of Defence. Its main role is to act collaboratively and to explore means of resolving issues related to contamination. According to the Shine Lawyers submission, the July 2014 public announcement by Defence gave rise to uncertainty, confusion and anxiety for people affected by the contamination as well as for members of the wider Oakey community. While the residents of Oakey were advised not to drink bore water:

Nothing was said about using bore water for other purposes. Nothing was said about eating food that was grown using bore water. Nothing was said about using bore water for domestic purposes, including cooking, showering and washing. Nothing was said about eating meat or poultry that drank bore water, or was raised on feed that in turn was grown using bore water. And, importantly, nothing was said about the possible consequences for those people who had been exposed to bore water, for whatever reason, over many years.¹⁵

2.13 Defence is undertaking a long-term environmental investigation and assessment of the groundwater beneath the AACO base and surrounds. Defence anticipates that the investigation and any subsequent management actions may take several years to implement.¹⁶

Pathways to contamination

2.14 One issue raised in evidence was the difficulty identifying the pathway(s) to contamination in Oakey. Unlike the situation in Williamtown, where contamination of waterways and bores is the primary source of contamination in humans, uncertainty exists around how PFOS/PFOA is getting into the bloodstream of Oakey residents, especially those living outside the contamination zone. Dr Eric Donaldson, a landholder with a thousand acres adjoining the southern boundary of AACO and a professional background in the biological sciences, told the committee he did not believe the higher than normal blood level readings from specimens collected was only attributable to drinking bore water or consuming meat, milk and fish:

Certainly, there are very few people in that plume that have their own cow that they milk...There are very few people in that plume that have eaten their own meat—very few. There is no doubt that some people have high levels I could attribute to watering feed, the stock eating the feed and then the humans eating the stock. I think I have that pretty well established, but that is very few people in the plume.¹⁷

2.15 There is no doubt that a small number of residents drink bore water on a regular basis and also use their bores to supplement household water requirements, such as providing water for bathing, showering, cooking, washing and in gardens (growing vegetables and fruit trees) and for poultry, livestock and other produce.

15 Shine Lawyers, *Submission 88*, p. 3.

16 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 9 March 2016, p. 41.

17 Dr Eric Donaldson, *Committee Hansard*, 9 March 2016, p. 10.

Many residents also top-up their rain water tanks with bore water during dry spells for human consumption and other domestic uses.¹⁸

2.16 A 2015 audit by AECOM indicated that complete exposure pathways are likely to exist between PFOS/PFOA use at AACO and the following:

- domestic irrigators extracting water for edible crops and livestock;
- agricultural irrigators;
- agricultural users of biosolids sourced from regional wastewater treatment plants;
- recreational users of Oakey Creek and sporting fields; and
- regional terrestrial and Oakey Creek ecologies (avian species, freshwater mussels and edible terrestrial and aquatic species).¹⁹

2.17 When asked at a public hearing if Defence knew how contamination had occurred for residents who did not drink bore water or eat locally processed foods in excessive amounts, a senior official told the committee:

That is what our human health risk assessment is looking at. The human health risk assessment is ongoing at Williamtown and Oakey. The reason we talk to the community and ask them to fill out questionnaires about water that they may or may not use and products they may or may not consume—lifestyle in general—is to try and understand what possible pathways exist for PFOS and PFOA to find their way into the human system. We are working on that. I do not understand it. We had thought that the main exposure routes would be through drinking contaminated water or, for example, eating fish that had bioaccumulated the PFOS.²⁰

2.18 The official went on to say that it is possible that some people have been exposed in ways that are completely unrelated to pathways that have been identified in Williamtown and Oakey, for example '...something else they do in their life'.²¹

Water use

2.19 Oakey has been supplied with potable water from the Mt Kynoch Water Treatment Plant since the commissioning of the Toowoomba Oakey Pipeline (TOP) on 15 December 1997. Previously, water was supplied exclusively from bores that were put down most likely during the Second World War. Consequently, the water

18 Shine Lawyers, *Submission 88*, p. 9.

19 Shine Lawyers, *Submission 88*, p. 7.

20 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 23.

21 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 23.

quality in Oakey was '...fairly poor. Any hot water systems or any filters were blocked up pretty quickly'.²²

The bore water associated with the local ball field out here had a reasonable mineral load in it—a mineral load based on conductivity and total dissolved solids—and it was also quite hard. The hardness values of that water were around 500 milligrams per litre and, based on the National Health and Medical research Council guidelines, good quality water should be between 60 and 200 milligrams per litre.²³

2.20 For a decade from 1999, the region experienced a significant drought. The Toowoomba Regional Council submission described measures that were taken in an effort to drought-proof the community:

In 2006 the State Government provided funding to construct a Reverse Osmosis (RO) Water Treatment Plant as part of the overall drought response measures to supplement dwindling reserves in the Toowoomba supply storages.²⁴

2.21 The Oakey bore field was brought back on line for approximately four years from October 2008 to supply feed water to the newly-commissioned Oakey Reverse Osmosis Water Treatment Plant (Oakey RO WTP) before the plant was taken offline for maintenance in November 2012. That meant that water coming out of the bores through the RO process was blended with more water from the bores and further blended with water from Toowoomba to supplement the supply for Oakey:

Extraction from the bore field continued until the RO WTP and supply bores were taken out of service on 30 November 2012. Since the cessation of the supplementary supply from the RO WTP, water supply in Oakey has been exclusively sourced from the Mt Kynoch WTP via the Oakey Toowoomba pipeline.²⁵

2.22 It was likely that the RO process would have removed any chemical of concern, including PFOS or PFOA, at that time as it is able to remove large molecules. Council was of the view that while the water going into the system contained contaminants, it '...would have been in-line with health guidelines that were around, if there were any at the time'.²⁶ At the 9 May public hearing, Council elaborated:

It is about an 80-20 mix. It is 80 per cent water going through the RO plant, which is pure water, mixed with about 20 per cent of raw bore water to

22 Mr Kevin Flanagan, General Manager Water and Waste Services, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 1.

23 Mr John Mills, Manager Water Operations, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 3.

24 Toowoomba Regional Council, *Submission 115*, p. 2.

25 Queensland Government, *Submission 112*, p. 1.

26 Mr Kevin Flanagan, General Manager Water and Waste Services, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 1.

make a shandy, which then went to the large reservoirs on the hill here. Then it was blended with a further 30 per cent—a 30-70 blend—of Toowoomba water. The blend, we believe, would have been well below the limits that were around at the time...It was 0.3 micrograms per litre, I think.²⁷

2.23 Council advised that because AACO is located on the same aquifer from which Oakey RO WTP draws feed water '...the presence of perfluoroalkyl substances (PFAS) in the aquifer originating from prolonged use of firefighting chemicals at the Centre...meant that the Oakey RO WTP could not be returned to service due to the risk of toxicity that PFAS presents'.²⁸ Any maintenance activities have been put on hold due to the groundwater contamination.

2.24 Council further assured the committee that the residents of Oakey currently have access to clear, clean water: 'You can rest assured that is the case for everybody who is connected to the reticulated supply...provided by the Toowoomba Regional Council [which] is up to the Australian Drinking Water Guidelines'.²⁹

Impact of contamination on the Oakey community

2.25 Evidence presented to the committee demonstrates that while contamination has caused significantly elevated levels of PFOS/PFOA in the blood of many Oakey residents, the health implications flowing from these elevated levels are far from clear. Shine Lawyers argued that while scientific opinion around the world varies as to the water quality guidance value for PFOS in freshwater, '...what is obvious is that levels at Oakey are many multiples of what is considered a "safe" level of exposure from drinking water'. This includes elevated levels of PFOA in the town water supply bore 8 located at the Oakey showgrounds, and PFOS concentrations above the adopted drinking water limit at 42 of the 112 bores tested, one of 13 creek samples tested and 39 of 43 drainage line locations tested.³⁰

2.26 Dr Donaldson advised the committee that he had investigated the distribution of several perfluorinated compounds in the plume area with the cooperation of neighbours and other residents and with the assistance of colleagues:

To my chagrin and surprise my results exposed a much greater level of exposure than expected. As a matter of professional courtesy I sent some of my results to the Department of Defence. The results were subsequently confirmed.³¹

27 Mr Kevin Flanagan, General Manager Water and Waste Services, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 2.

28 Toowoomba Regional Council, *Submission 115*, p. 2.

29 Mr Kevin Flanagan, General Manager Water and Waste Services, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 6.

30 Shine Lawyers, *Submission 88*, p. 10.

31 Dr Eric Donaldson, *Committee Hansard*, 9 March 2016, p. 7.

2.27 Dr Donaldson expressed the view that the media has presented a '...damning portrayal of Oakey by linking the whole district to health threatening contamination',³² as a consequence of ill-advised public meetings and injudicious statements by public officials (such as 'do not drink the bore water' and 'PFOS is the new Asbestos'). His submission argued that the adverse perceptions of Oakey '...should not be allowed to fester as there is potential for far reaching damage'.³³

Concerns of residents

2.28 The committee received many submissions from residents concerned about elevated levels of PFOS/PFOA in their blood, the sudden decrease in value of their properties and the stress the contamination issue has placed on their families.³⁴ The overall sense of anxiety was captured by the submission from Ms Robyn Wilkins:

I am really concerned about the valuation of my property due to the contamination from the Oakey Army Base through no fault of my own...Neither the Queensland Government or the Commonwealth Government have done anything to help us, we feel like we have been abandoned. Our property is set up for horse training and this requires a substantial and secure water supply. We can't go on like this. I just don't know what to do. We are in dire need of any assistance you can give to end the indefinite hanging in the air. We desperately need a resolution to this problem the Army has created.³⁵

2.29 Similar evidence was received from Mr Brad Hudson, whose property is located approximately 400 metres from the Army base, about the effects of using contaminated bore water for over 15 years to shower, wash, clean, drink, water stock and hose gardens. His submission described how he, his wife and three children have 'extremely high' levels of PFOS in their blood and are worried about the effects on their future health:

My 5 year old daughter has high levels already at her young age. God knows how this will effect her in her future life. My levels...are extremely high and concerning since I have already had testicular cancer at my age of 42. It is extremely hard to close my eyes at night thinking about my family and our futures with these contaminants in our systems at the high levels that they are...

Wouldn't mind if someone from government was to live a life of uncertainty like we are forced to do. Deal with the stress and headaches that come with our lives now, which is at time unbearable. To try waking up one day and realising that their \$700000 property is worth next to nothing now.

...

32 Dr Eric Donaldson, *Submission 102*, p. 1.

33 Dr Eric Donaldson, *Submission 102*, p. 1.

34 For example: Ron and Jenny Hess, *Submission 123*; Ms Sonya Street, *Submission 91*; Mr Gary Watson, *Submission 90*; Ms Dianne Priddle and Mr David Jefferis, *Submission 86*; Ms Coral Kennedy, *Submission 81*; Mrs Veronica and Mr Rodney Watson, *Submission 74*.

35 Ms Robyn Wilkins, *Submission 105*, p. 1.

We need the government...and the army to step up and take full responsibility of the situation and to do whatever it takes to fix this problem. Our futures are depending on it.³⁶

2.30 During the hearing in Oakey on 9 March, the committee heard powerful evidence from residents about the health and mental health implications of having elevated levels of PFOS and PFOA in their blood, the lack of an adequate and timely response by Defence and Queensland government authorities, the collapse in the value of their properties, and the overall uncertainty surrounding their future. A resident of nearly 30 years, Ms Jennifer Spencer and her partner live on a six acre property in the Oakey racing precinct. They were first advised of PFOS/PFOA contamination of the groundwater covering their property in 2014:

From that day I was deeply concerned. As time went by we were involved in and attended all of the meetings held by Defence. These meetings just led to more upset and frustration, as there were no new answers ever given to us...

We are now living our lives in limbo. We purchased our property in good faith. We thought that we were on the home stretch in our lives...It all feels now like it has been for nothing. We are now living in a rented house, paying someone else's mortgage. Our personal lives are a mess. We are both suffering depression.³⁷

2.31 Other residents presented the committee with disturbingly similar accounts of their encounter with PFOS/PFOA contamination and the response of the authorities. Mr Peter Jones, a resident of 25 years, who lives on a 2.728 hectare block located on the south-western boundary of the Army base, told the committee:

I have contacted Queensland Health and I have spoken to Queensland Health representatives in person, and they have no answers. The problem is not of my making...My life has changed, and the uncertainty is very stressful and is taking a toll on my wellbeing.³⁸

2.32 Others expressed anger at the apparent lack of understanding and information provided by the authorities after the contamination became widely known in 2014. The owner of Berwick Stud on the Warrego Highway, Ms Dianne Priddle, told the committee:

I find the lack of understanding and the lack of information given to us is atrocious. All I want is some answers—and quickly. The longer that this takes, the longer this township suffers with taint and contamination.³⁹

2.33 Evidence from Professor Jochen Mueller, Professor of Environmental Toxicology at the University of Queensland, expressed his personal view that individuals with an elevated reading of PFOS/PFOA have a very small risk of

36 Mr Brad Hudson, *Submission 84*, p. 1.

37 Ms Jennifer Spencer, *Committee Hansard*, 9 March 2016, p. 13.

38 Mr Peter Jones, *Committee Hansard*, 9 March 2016, p. 14.

39 Ms Dianne Priddle, *Committee Hansard*, 9 March 2016, p. 14.

experiencing adverse health outcomes as a result of exposure: 'I think the evidence that is out there...from all I know from the literature, I would not expect that this effects my health in any way. I think people being worried about it affects their health more'.⁴⁰ When questioned further about the likely health effects on the residents of Oakey, Professor Mueller elaborated on the relationship between the contamination, living with uncertainty and health outcomes:

If I was an Oakey resident...and someone came out and announced..."By the way, your land is contaminated and you might not be able to use your bores or eat your cows", and my values were decimated overnight and I had a blood test which ended up with a high level of PFOS or PFOA, I would be pretty disappointed that that outcome had been visited on me by Defence or Health or whoever.⁴¹

Blood testing

2.34 The Defence submission advised that in late 2014 it wrote to residents located within the detection area inviting them to nominate to participate in a limited blood testing program. The program was intended to be available to a limited number of residents who met a set of clear eligibility criteria. At the 9 March hearing, the Department of Veterans' Affairs' Chief Medical Officer, Dr Ian Gardner, told the committee that the decision by Defence to fund blood testing:

...started out as an initial request from [Dr Donaldson] to Defence through me for us to consider funding a small series of blood tests on the people whom he was providing clinical advice to in and around his property. Subsequently, in discussion with Defence legal and Shine Lawyers, and after a lengthy period within Defence to get approval to undertake this testing...we agreed to expand the cohort to about 75 people...We had 75 tests done, including 69 originals, and some have been tested twice because they were done privately under a separate program.⁴²

2.35 In May 2015 Defence engaged a pathology company to facilitate collection and analysis of up to 100 blood samples from those who met the eligibility criteria. The Defence submission went on to say:

Testing was provided to a limited number of people who self-nominated and met the criteria of living on properties within the detection area, with their bore results indicating elevated levels of PFOS and PFOA, and who had consumed ground water in the last three years. Other people were permitted to participate in the testing on a case-by-case basis.⁴³

40 Professor Jochen Mueller, Professor of Environmental Toxicology, University of Queensland, *Committee Hansard*, 9 March 2016, p. 25.

41 Professor Jochen Mueller, Professor of Environmental Toxicology, University of Queensland, *Committee Hansard*, 9 March 2016, pp 27–28.

42 Dr Ian Gardner, Principal Medical Advisor and Special Consultant to the Secretary, Department of Veterans' Affairs, *Committee Hansard*, 9 March 2016, p. 38.

43 Department of Defence, *Submission 87*, p. 24.

2.36 In the end, a total of 75 samples were analysed. At a public meeting in Oakey on 25 August 2015, residents were advised that blood samples had been sent and batched for analysis by the testing laboratory. Test results were sent to residents in the second half of September 2015. The Shine Lawyers submission questioned why it took Defence five months to release the blood test results.⁴⁴

2.37 The Defence submission advised that it did not intend to conduct further blood testing in relation to PFOS or PFOA, arguing this approach is consistent with advice provided by the NSW Health Department and by enHealth. Defence noted that the Queensland Health Department had not yet published any health guidance on PFOS or PFOA.⁴⁵

2.38 Defence's decision not to continue with a voluntary blood testing program as part of its community response in Williamtown and Oakey drew criticism from the Shine Lawyers submission:

There has been the recent suggestion that further blood testing ought not to be carried out, because of the potential anxiety and harm it may cause. It seems counterintuitive to approach a problem of this nature without seeking to understand the extent of the problem, and to gather as much information about it as possible. Those residents for whom we act, and, we suspect, the other residents of Oakey strongly resist the notion of their being kept 'in the dark' about these matters. We are unaware of any other PFC contaminations globally where blood testing did not occur.⁴⁶

2.39 Their supplementary submission continued this line of criticism, but in stronger terms:

We respectfully submit that it is paternalistic and a source of considerable resentment among those affected residents who have subsequently requested blood testing and been denied that opportunity by Defence ostensible on the grounds that a positive result may cause unnecessary anxiety.

The anxiety has already been created given that a positive blood test result now seems to be the more likely outcome for many Oakey residents and we are aware that a number of residents have indicated an intention to have private PFC blood testing at considerable expense...⁴⁷

2.40 The Chief Health Officer and Deputy-Director-General in the Queensland Department of Health advised the committee that Defence had shared the results of the blood tests with the Queensland state health authorities:

The average value of PFOA in 74 Oakey residents that they tested in 2015 was 3.05 nanograms per millilitre. It ranged—I think the range is very important—from a minimum of 0.78 nanograms per millilitre up to 19.21

44 Shine Lawyers, *Supplementary Submission 88.1*, p. 7.

45 Department of Defence, *Submission 87*, p. 11.

46 Shine Lawyers, *Submission 88*, p. 23.

47 Shine Lawyers, *Supplementary Submission 88.1*, p. 7.

nanograms per millilitre, remembering that the Australian average was 7.6. That is PFOA, so suggesting that that is not a big concern.

The bigger concern is PFOS. The average value for those 74 Oakey residents in 2015 was 69.38 nanograms per mil. . Again, I think it is the range that is important. It ranged from a minimum of 2.35 nanograms per mil up to a maximum of 381.29 nanograms per mil—again remembering that the average Australian pooled level was 21.3 nanograms per mil.⁴⁸

Defence engagement with the community and Toowoomba Regional Council

2.41 The committee received evidence critical of the timeliness of information provided to Council and the local community by Defence, which echoed the concerns raised by the residents of Williamtown about Defence's method of consultation. Toowoomba Regional Council, for example, expressed concern that after being provided with reports of investigations into contamination by Defence in August 2014 '...limited additional information has been provided to Council'. Council also engaged CH2M Hill, a global engineering company that provides consulting, design, construction and operations services, to undertake scoping studies relating to the impacts of the contamination on the future operation of the Oakey RO WTP as a result of '...the limited amount of information being provided by the Department of Defence...'.⁴⁹

2.42 Shine Lawyers was particularly critical of Defence's approach to the health impacts of firefighting foam contamination on residents and their genuinely held concerns about links between PFOS/PFOA contamination and various cancers.⁵⁰ Shine Lawyers also raised concerns about the lack of public confidence in Defence's handling of the data obtained from testing for contamination, and what they considered was a possible lack of independence within Defence:

...the people that [Defence] is appointing to interpret the data that it is gathering are people that we would expect a certain result from...We have real concern about the likely outcomes of the processes currently being undertaken. You know when a panel is independent. You know the people in whom the public have confidence.⁵¹

2.43 When asked to expand on how the process could be improved, Mr Peter Shannon told the committee:

I would like to see Defence engage an independent panel to comment upon the data that it is collecting and what it is doing. As I understand it, at the moment Defence and basically everyone is being guided by the interpretation to be placed on the data by one person. That is the concern

48 Dr Jeannette Young, Chief Health Officer and Deputy Director-General, Prevention Division, Queensland Department of Health, *Committee Hansard*, 9 March 2016, p. 35.

49 Toowoomba Regional Council, *Submission 115*, p. 2.

50 Shine Lawyers, *Supplementary Submission 88.1*, pp 5–6.

51 Mr Peter Shannon, Legal Partner, Shine Lawyers, *Committee Hansard*, 9 March 2016, p. 19.

that we have. We think that a carefully selected panel is more likely to engender confidence.⁵²

2.44 Defence rejected the criticism that it was not as forthcoming with the local community as it should have been, telling the committee categorically: 'We have nothing to hide':

We have held seven separate community engagements over the last few years... We did letterbox drops earlier in the piece. We had information up on a website when the study a couple of years ago was done. That was the first study that we did and we made the results of that study available. They are on our website, freely available, and the studies that we are doing at the moment will be made available when they are finished.⁵³

2.45 Defence also confirmed that it was committed to an ongoing process of consultation with the local community, putting on the record that 'Defence does not walk away from its responsibilities in dealing with this issue':

The last community consultation process we had two weeks ago was quite successful. It was differently structured to the previous ones; it was more of a community drop-in rather than a big presentation. We are very interested in getting feedback from the community on how we can improve in the way we consult the community. We will try and meet expectations where we can.⁵⁴

2.46 In response to the specific criticism about the lack of independence regarding the interpretation of blood test results, Defence stated it was not picking and choosing experts to arrive at a particular view, and all of its work is independently reviewed by an expert panel:

We use expert consultants and we only use people who have a national accreditation either in a testing laboratory, companies like ENTOX, or in terms of the environmental health experts that we use. We have all of our results peer reviewed by third parties. We do not rely just on one toxicologist. There is a range of people who are involved in this. If there were to be, for example, an expert panel established here by the Queensland government, as the New South Wales government has done, we would have no problem at all with full exposure of everything we have done into an expert panel for another peer review. We would have no problem at all.⁵⁵

2.47 The Defence submission stated that Stage 2C of its environmental investigation commenced in June 2015. These works include:

52 Mr Peter Shannon, Legal Partner, Shine Lawyers, *Committee Hansard*, 9 March 2016, p. 22.

53 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 9 March 2016, p. 38.

54 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 9 March 2016, p. 42.

55 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 9 March 2016, p. 39.

- hydro-geological assessment (sampling of drainage lines, creeks and irrigated soil; installing 20 new ground water monitoring wells on and off base; re-sampling of specific existing offsite bores; ground water modelling; and a hydro-geological assessment report);
- identifying and prioritising management of contamination pathways (literature review of current PFC remediation and management options and assessment of their feasibility); and
- community engagement and updates (management of a community hotline and project email address; drafting FAQs and project updates/fact sheets; community information sessions; stakeholder roundtables; direct communication with landholders; and water use surveys.⁵⁶

Queensland Government response

2.48 Representatives of Queensland Government agencies appearing before the committee on 9 March provided an overview of how the Queensland Government is working to assist Defence in addressing contamination issues at Oakey. In particular, the government has formed an interdepartmental committee chaired by the Department of Premier and Cabinet and comprising representatives from Queensland Health, the Department of Agriculture and Fisheries, the Department of Heritage and Environment Protection and the Department of Natural Resources and Mines.⁵⁷

2.49 Defence first advised the Queensland Department of Environment and Heritage Protection of the contamination in December 2012. In December 2013 Defence further advised that the contaminants from the use of firefighting foams in training exercises between 1970 and 2005 had infiltrated groundwater below the base and was likely to have migrated outside the base.⁵⁸

2.50 The Director-General of the Department of Environment and Heritage Protection, Mr Jim Reeves, told the committee:

Since being informed of the potential for off-site contamination in December 2013, the Queensland government representatives have attended all community meetings run by the Department of Defence, and continue to monitor advice given by the Department of Defence to the public. In addition, Queensland Health has prepared advice for community members who contact the department through the 13 HEALTH hotline, and it has provided advice to local general practitioners, should they be approached by members of the community.⁵⁹

56 Department of Defence, *Submission 87*, p. 25.

57 Mr Jim Reeves, Director-General, Queensland Department of Environment and Heritage Protection, *Committee Hansard*, 9 March 2016, p. 29.

58 Mr Jim Reeves, Director-General, Queensland Department of Environment and Heritage Protection, *Committee Hansard*, 9 March 2016, p. 29.

59 Mr Jim Reeves, Director-General, Queensland Department of Environment and Heritage Protection, *Committee Hansard*, 9 March 2016, p. 29.

2.51 Mr Reeves further advised the committee that the Queensland Government supported the development of a nationally consistent approach for standards and screening guidelines, as well as assessment, management and remediation protocols for sites identified as being contaminated: 'This matter should not be left to individual states or territories'.⁶⁰ The Queensland Government submission added:

A nationally consistent approach will support effective communication about impacts of contamination that is based on rigorous scientific assessment. It will also support clarity about roles and responsibilities, where there are cross-jurisdictional implications.⁶¹

2.52 Mr Reeves confirmed that for constitutional reasons the Queensland government does not have a direct regulatory role over activities on Defence bases. However, this does not prevent the Queensland government from testing the rigor of investigations undertaken by Defence and their conclusions. Furthermore, the Queensland government had received legal advice to have AACO declared a contaminated area by having it registered on the state's inventory of contaminated sites, but '...it is not a straightforward matter when you get constitutional lawyers involved'.⁶²

2.53 A representative from the Queensland Department of Environment and Protection provided clarification around the Environment Management and Contaminated Land Registers and how state law can be applied to Commonwealth law:

It is a very complex area. We have sought legal advice, we have formed a position that we can list the base on the environmental management register, but we are far less confident in our ability to actually compel defence to do things in terms of heads of power. It has been a case of us providing scope of works to Defence, in terms of what needs to be done to identify exposure pathways and areas at risk.⁶³

2.54 On the issue of the different approaches taken by the New South Wales and Queensland authorities in response to the Williamtown and Oakey contamination issues respectively, a Queensland Government representative advised the committee that while it was working through the Australian Health Protection Principal Committee to obtain one source of advice:

I think we were caught a little off balance in that New South Wales was told at one stage about Williamtown and we were told about Oakey and we did not have a chance to sit down and methodically work out what the risks

60 Mr Jim Reeves, Director-General, Queensland Department of Environment and Heritage Protection, *Committee Hansard*, 9 March 2016, p. 30.

61 Queensland Government, *Submission 112*, p. 1.

62 Mr Jim Reeves, Director-General, Queensland Department of Environment and Heritage Protection, *Committee Hansard*, 9 March 2016, p. 30.

63 Mr Andrew Connor, Executive Director, Industry, Development and South Queensland Compliance, Queensland Department of Environment and Heritage Protection, *Committee Hansard*, 9 March 2016, p. 32.

genuinely are and what information we should be providing. That work has now started at the national level, so all states and territories have been engaged.⁶⁴

Remediation

2.55 Very little evidence was taken on the issue of remediation on and off-base at AACO. At the 9 March hearing, Defence advised that it was researching remediation options to prevent further movement of the chemicals from the high-concentration areas in the ground out into the aquifers:

...we have been investigating remediation options and techniques. Within in about four weeks, we will start doing testing trials on the ground on the base at Oakey of a couple of techniques for remediating the soils there of the contamination that we know exists there. We have researched globally looking for techniques. We are talking to the Americans who have some promising techniques. We are talking to companies like CRC Care and other experts in Australia. We probably have about four or five different potential options that we are looking at and we will be starting trials on the base here, certainly, next month.⁶⁵

2.56 At a later hearing, Defence provided a detailed overview of the actual techniques being put to trial in Oakey and Williamtown:

The first one is a technique of containment through either solidification or stabilisation. This is for where we have PFOS in soils or in the ground. The techniques review various types of product they refer to as resins that would be injected into the ground. I get very quickly out of my technical depth here, but they essentially bind the PFOS so that it cannot move—for example, into groundwater and then away—or they seek to effectively solidify that area of ground, which has a similar effect to binding. I think they are probably quite similar techniques, but they are different technically.

We are...looking at something called physiochemical sequestration, which is a two-part process that looks at stabilisation first in the ground, using one of these resins, and then later removal of the soils that have been stabilised for treatment through an approved process. We are and have been using filtering of water through activated granulated carbon. We have spoken about the use of that before, for example, at Williamtown. Where we are removing groundwater to do works, it is being filtered through that process before being reinjected out below levels of concern. We are looking at a technique called foam separation, which is only applicable to water, standing water—I do not think underground water. It is simply a question of agitating the water so that the foam is generated and then taking the foam away and having that treated somehow.

64 Dr Jeannette Young, Chief Health Officer and Deputy Director-general, Prevention Division, Queensland Department of Health, *Committee Hansard*, 9 March 2016, p. 35.

65 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 9 March 2016, p. 39.

We have started stabilisation and solidification trials at both Williamtown and Oakey. If people care to have a look, what we are doing is drilling large core samples at various places. There would be about 90-millimetre diameter cores to whatever depth is required. We are taking those samples away and then running the trials in a more laboratory type environment, so still relatively small scale. We will know relatively quickly whether those trials work. The reason we are trying a range of techniques is that the soils are different in different places, whether they are clay based or sandy soils or whatever, and we think and we are advised by the various specialist companies we are talking to that different techniques will work better in different soil compositions. As these trials mature, if we find that they look like they are delivering as advertised, then we will seek to gear up and start applying the techniques at both Oakey and Williamtown. But right now it is too early to say, as we have literally just started on those works this week.⁶⁶

Compensation

2.57 The Toowoomba Regional Council advised that the loss of production from the Oakey RO WTP is potentially 730 megalitres per annum which would require Council to bring forward capital works to cater for expected growth. Council told the committee three options are available to provide that quantity of water to a growing community. First, the Oakey RO WTP would need to be extensively upgraded to safely treat and use the PFAS contaminated ground water, which would be an expensive option. Second, Council could look for new bores outside the contaminated areas from between five to 20 kilometres outside the contaminated plume. However, the alluviums '...that we are in here are heavily over-allocated, and we expect it would be very difficult to get additional bores to come to the RO plant'. The third option is to augment the supply coming in from Toowoomba.⁶⁷

2.58 The Council submission also noted that:

If Council was to upgrade the Oakey WTP, Council would face increased regulatory compliance and would still need to counter significant community perception, given the current level of concern in the community over the aquifer contamination. Additionally, without further processing, disposal of the waste stream from the Oakey RO WTP via the sewerage network to the Wetalla Water Reclamation Facility located in Toowoomba would jeopardise the existing extensive beneficial biosolids reuse program. Council may have to abandon the Oakey RO WTP and be forced to duplicate the Toowoomba Oakey Pipeline to ensure a safe and reliable supply to the township of Oakey and the Army Aviation Centre Oakey.⁶⁸

66 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 13.

67 Mr Kevin Flanagan, General Manager Water and Waste Services, Toowoomba Regional Council, *Committee Hansard*, 9 March 2016, p. 1.

68 Toowoomba Regional Council, *Submission 115*, p. 2.

2.59 The Council submission stressed the significant additional cost that will be incurred as a result of the ground water contamination and stated that as a result it will be seeking financial compensation from the Australian Government.⁶⁹

2.60 Dr Donaldson submitted that any claims of financial damage should be expeditiously investigated and settled to '...quieten the aggravation, take the matter off the front pages and give Oakey a positive image as only a small number of people are involved'.⁷⁰

2.61 The Shine Lawyers submission argued that in appropriate cases involving affected landowners, '...urgent temporary measures and/or financial assistance should be provided'. Moreover, any approach to compensation issues should be 'generous' and not 'niggardly', ensuring that independent assistance is provided in formulating claims and that individual claims are resolved in a timely manner. The submission argued that an Independent Compensation Assessment Panel (ICAP) should be established comprising at least an experienced valuer, forensic accountant and a lawyer or retired judicial officer. Protocols should also be put in place to govern the functioning of the ICAP to address:

- reimbursement of reasonable legal, accounting and valuation fees incidental to making, pursuing and resolving any claim; and
- that any determination as to an appropriate compensation amount will be binding on Defence but not upon the claimant, who will be at liberty to accept the amount assessed, or be entitled to pursue their rights at law.⁷¹

2.62 Defence confirmed it had received the protocols from Shine Lawyers, however it had not acted on the proposal or developed any counter-proposals on its own on the issue of compensation.⁷²

Committee view and recommendations

2.63 The committee is not surprised that the evidence received in relation to Oakey, especially the effect of the contamination on residents and the response of Commonwealth and state government authorities, has largely mirrored the evidence received in relation to the unfolding crisis in Williamtown. While Defence was again criticised in its response to the contamination from AACO and its engagement with the local community, one noticeable difference between Williamtown and Oakey is the absence of any response by the Queensland Government comparable to the unilateral actions taken by the New South Wales EPA. Queensland government authorities have largely remained in the background, which came in for some criticism by residents.

69 Toowoomba Regional Council, *Submission 115*, p. 2.

70 Dr Eric Donaldson, *Submission 102*, p. 1.

71 Shine Lawyers, *Submission 88*, pp 24-25.

72 Mr Michael Lysewycz, Defence Special Counsel, Defence Legal, Department of Defence, *Committee Hansard*, 9 March 2016, p. 37.

2.64 The committee does not share the concern of Shine Lawyers about the independence of Defence in its analysis of data from samples collected from many contaminated sites. The committee is satisfied that the work being undertaken by Defence to collect, interpret and process samples is robust and underpinned by verifiable science and a whole-of-government approach involving high-level advice from state authorities. The committee did not receive evidence demonstrating any conflict of interest within Defence, pre-determined outcomes or any shortcomings with the current process.

2.65 The committee examined the issue of voluntary blood testing on the residents of Williamstown in its first report and found that Defence was taking its advice from NSW Health which recommended against blood testing because it cannot predict the level of health risk. The committee notes that similar advice has been provided at the Commonwealth level by EnHealth in its guidance statement of 16 March 2016. Notwithstanding the consistency of this advice, the committee maintains its position that uncertainty regarding levels of exposure to PFOS/PFOA is causing anxiety for Oakey residents. The committee received evidence that people are interested in blood tests and are likely to obtain them privately at significant personal cost.

2.66 The committee also heard that the authorities cannot explain why some residents who live outside the investigation area have significantly elevated levels of PFOS/PFOA in their blood. The reasons for this are unknown. Uncertainty also remains around the exact pathways to contamination from AACO. For these reasons the committee is of the view that regular blood testing is warranted. Given that Defence initially funded a program of voluntary blood testing for Oakey residents and only recently changed its position, the committee strongly urges Defence to continue funding a program of voluntary testing on an annual basis for residents most affected by contamination.

Recommendation 1

2.67 The committee recommends that the Department of Defence recommence and fund a program of blood tests for residents in the Oakey investigation area on an annual basis.

2.68 Notwithstanding the efforts by Defence to engage with residents of Oakey affected by the contamination from AACO, the committee is concerned that, like the situation in Williamstown, residents are living under a cloud of uncertainty which is having a significant impact on their lives. The committee is concerned by the evidence received at the 9 March hearing which demonstrated a heightened level of stress and its effect on the mental health of many residents and their families. The committee is of the view that all affected residents and business people should be able to access counselling and assistance.

2.69 On this note, the committee is disappointed that the Queensland Government was not proactive when it became aware of the contamination by providing the local community with the on-ground support it clearly needed. This stands in contrast to the initiative shown by the New South Wales authorities in establishing dedicated local engagement officers in the Williamstown area to provide ongoing support to residents. The committee also notes that the Queensland Government submission was silent on

this issue. Defence should be working closely with the Queensland health authorities to ensure that residents are provided with the mental health and counselling support services they need.

Recommendation 2

2.70 The committee recommends that the Department of Defence ensure that mental health and counselling support services are provided free of charge to those affected by PFOS/PFOA contamination from Army Aviation Centre Oakey, and that these services continue for as long as they are required by residents.

2.71 The committee notes that neither Defence nor the Queensland Government provided an estimate of the number of residents and properties around AACO which are potentially affected by PFOS/PFOA contamination. However, the committee is of the view that it is likely to include a significant number of small acreage properties of which many will have contaminated bores. Not unlike Williamtown, the committee accepts that many residents are concerned that their properties have become worthless as a result of the contamination.

2.72 The committee notes that in responding to its first report on RAAF Base Williamtown, the Government gave an undertaking to consider the matter of property acquisition, but only after interim health reference values are established and detailed environmental investigations concluded: 'Until these activities are finalised, the Australian Government is not in a position to determine the actual level of risk for existing property use'. The committee is disappointed by this response given that no timeframes are provided, potentially leaving residents in Williamtown and Oakey in a state of uncertainty for the indefinite future.

2.73 The committee reiterates the point made in the conclusion of its first report on Williamtown that the Commonwealth Government is best placed to manage the risks of ownership of land which it has played a key role in contaminating. Defence should be actively engaging with residents concerned that their properties may no longer be fit for purpose and interested in being relocated to an alternative estate within the local community which is free from contamination.

Recommendation 3

2.74 The committee recommends that the Commonwealth Government commit to voluntarily acquire property and land which is no longer fit for purpose due to PFOS/PFOA contamination from Army Aviation Centre Oakey. The committee further recommends that the Commonwealth Government assist residents who may wish to relocate to an alternative estate within the local community which is free from contamination.

RAAF Base Williamtown revisited

2.75 Following the tabling of report Part (a) on the contamination by firefighting foams at RAAF base Williamtown in February 2016, the committee received further evidence on developments as they affected that community, including the response by Commonwealth and state government authorities. At the 7 April Canberra hearing, Defence provided an update on the situation in Williamtown which touched on several

key issues examined in detail in the committee's first report. These issues are summarised below.

Remediation

2.76 Defence advised that tests were about to commence on a range of remediation techniques at both Williamstown and Oakey:

We have been in touch with a range of players who have got a range of potential techniques for us to use. The majority of them have been tested on a very small scale, so we are starting to put trials in place now. If the techniques prove to work well, then we will start to roll them out on a bigger scale to start treating PFOS and PFOA in soils and water...⁷³

2.77 Further details about the various techniques used in these trials are included in this chapter at paragraph 2.58.

Community engagement

2.78 Defence advised that it continued to engage with the local community by holding additional meetings. This included a community drop-in session on 6 April to collect information from local residents about their use of water, consumption of dairy products and general lifestyle: 'The information that has been collected will be fed into the human health risk assessment study'.⁷⁴

2.79 While Defence confirmed that the Minister for Defence had not visited the community, the Assistant Minister for Defence, the Hon Michael McCormack MP, had attended community reference group meetings and meetings of elected representatives in Williamstown as the Assistant Minister responsible for Defence estate policy and major projects.⁷⁵

Water access

2.80 Defence advised that it continued to provide water to residents for whom groundwater is their only source of drinking water, and would continue to provide water for as long as it was necessary because drinking water that has PFOS/PFOA in it: '...is probably one of the primary causes of ingestion':

We are still providing water. We have processes in place to ensure that people do not go short of water. If the water is bottled, we are making sure that we collect all the bottles and the like. For some people it is tank water, and we are just refilling tanks.⁷⁶

73 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 12.

74 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 13.

75 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 12.

76 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 16.

Assessments

2.81 Defence advised that it had developed a close working relationship with the New South Wales EPA, and the human health risk assessment and environmental assessment being undertaken would be completed by August 2016:

Clearly, in particular at Williamstown we are pushing really hard to try and get data out of those assessments early so that we can provide that data to New South Wales authorities. They can then consider their position, particularly around the existing fishing bans that are in place.⁷⁷

Compensation

2.82 Defence advised that no formal compensation claims had been lodged in respect of contamination although there have been general discussions between Defence and the local community about issues which may be the subject of claims for compensation including mortgage stressors, business losses and sales of land. Defence also raised the prospect of a class action being launched in the near future by a Sydney Law firm on behalf of residents of Williamstown.⁷⁸

Government response to Report Part A

2.83 During a Foreign Affairs, Defence and Trade Legislation Committee hearing for the 2015-16 additional estimates on 10 February 2016, the Minister for Defence, Senator the Hon Marise Payne, gave an assurance that the issue of contamination was being taken seriously by the Minister and Assistant Minister, that a whole-of-government process was being undertaken to address the contamination at Williamstown, and that a Government response to the committee's first report would be provided as a matter of priority and 'not in three months' time'.⁷⁹

2.84 The Government Response was tabled on 15 April 2016 (the full response is included in Appendix 6). Recommendations 1, 3 and 4 were agreed; recommendation 8 agreed in part; and recommendation 7 not agreed. Recommendations 2 and 5 received an interim response. The following issues raised by the Government Response are noteworthy:

- Defence is committed to ensuring that residents continue to have access to drinking water and will continue to determine the most appropriate methods of delivery (Recommendation 1);
- Defence is engaging with the NSW Government to identify areas where the Australian Government may be able to assist in improving community awareness of the full range of available mental health and

77 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 13.

78 Mr Steven Grzeskowiak, Deputy Secretary, Estate and Infrastructure, Department of Defence, *Committee Hansard*, 7 April 2016, p. 18.

79 Senator the Hon Marise Payne, Minister for Defence, Foreign Affairs, Defence and Trade Legislation Committee, Additional Estimates Hearings, *Estimates Hansard*, 10 February 2016, pp 10–11.

counselling support services and how to access them (Recommendation 3);

- In response to contamination in Williamstown and Oakey, the Government is canvassing a national taskforce to coordinate the national response of government agencies to the management of PFOS and PFOA, to improve coordination between governments and to address community concerns (Recommendation 4); and
- Defence is currently completing a review of its environmental policy and supporting environmental management framework. Defence's policy is to meet the spirit and intent of state and territory legislation where there is no conflict with obligations under Commonwealth legislation (Recommendation 8).⁸⁰

2.85 The committee's recommendations which address compensation for commercial fisherman and the voluntary acquisition of property and land which is no longer fit for purpose, received only interim responses. The Government response to recommendation 2 restated that a financial assistance package offered to fishers and businesses affected by the decision of the New South Wales Government to institute fisheries closures had been implemented by the Government. It also noted that the Income Recovery Subsidy to individuals who have experienced a loss of income as a result of the Fullerton Cove and Tilligerry Creek fisheries closures will continue for a period of eight weeks after 30 June 2016.⁸¹

2.86 In relation to the NSW Government's decision regarding the closure of fisheries, which is due by 30 June 2016:

...[I]n the event that the NSW Government does not reopen these fisheries by 30 June 2016, the Australian Government will provide the opportunity for affected businesses to claim a Business Transition Payment of up to the \$25,000 to assist businesses pursue alternative sources of income if they wish to do so.⁸²

2.87 The Government response to recommendation 5 summarised the environmental investigations being undertaken by Defence in consultation with the NSW Government, and advised that the Australian Government:

...will further consider the matter of property acquisition once interim health reference values have been established and a detailed environmental

80 Australian Government Response to the Senate Foreign Affairs, Defence and Trade References Committee Report: *Inquiry into firefighting foam contamination Part A—RAAF Base Williamstown* pp 1–12.

81 Australian Government Response to the Senate Foreign Affairs, Defence and Trade References Committee Report: *Inquiry into firefighting foam contamination Part A—RAAF Base Williamstown*, p. 6.

82 Australian Government Response to the Senate Foreign Affairs, Defence and Trade References Committee Report: *Inquiry into firefighting foam contamination Part A—RAAF Base Williamstown*, p. 6.

investigation at RAAF Base Williamtown has been concluded, Until these activities are finalised, the Australian Government is not in a position to determine the actual level of risk for existing property use.⁸³

Correcting the record

2.88 The Government response included a 'correction of error of fact' in paragraph 3.11 of the committee's first report. The error of fact relates to the statement that the United Nations Persistent Organic Pollutants Review Committee had agreed that PFOA 'causes' kidney and testicular cancer, disruption of thyroid function and endocrine disruption in women.⁸⁴ The committee is unable to let this correction stand without a brief response.

2.89 The committee notes the correction did not identify that the source of the statement is the National Toxics Network submission. In no way does the statement reflect the committee's view or conclusion as implied by the Government Response. At the Oakey hearing, Dr Gardner acknowledged that the quote in the committee's first report '...came straight out of the National Toxics Network submission...where I believe they have incorrectly quoted [from the UN POP Review Committee document] which your committee has, in honesty, just picked up by mistake'.⁸⁵ This should have been reflected in the Government Response to avoid confusion and the risk of attributing to the committee a view which it does not hold.

2.90 The committee's intent in Paragraph 3.11 was to highlight that PFOA had been nominated for inclusion in the Stockholm Convention due to its dangerous toxicity, extreme persistence, bioaccumulation and long-range transport. These are matters of scientific fact which have not been disputed during this inquiry.

83 Australian Government Response to the Senate Foreign Affairs, Defence and Trade References Committee Report: *Inquiry into firefighting foam contamination Part A—RAAF Base Williamtown*, p. 9.

84 Australian Government Response to the Senate Foreign Affairs, Defence and Trade References Committee Report: *Inquiry into firefighting foam contamination Part A—RAAF Base Williamtown*, pp 3–4.

85 Dr Ian Gardner, Principal Medical Advisor and Special Consultant to the Secretary, Department of Veterans' Affairs, *Committee Hansard*, 9 March 2016, p. 41.