

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australian Defence Force Facilities and other Commonwealth, State and Territory Sites in Australia – 3 December 2015 ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Compensation for economic loss suffered by business owners as a result of the forced closure of industry surrounding the base, ongoing reputational issues and potentially a negative effect on property values.

Question reference number: 1

Senator: Gallacher

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) The Federal Government has put in place a household assistance package for businesses affected adversely by the extension of the closure of local fishing in Williamstown by a further eight months:
 - (a) How many applications have been processed so far and how many have been received?
 - (b) In light of media reports of difficulties experienced by a number of businesses, is the Department aware of these difficulties?
- (2) Which Federal department is responsible for managing this scheme?
 - (a) If not the Department of Defence, what is the role of the Department in this scheme?
- (3) With regard to the public declaration by the Commander of RAAF Williamstown, Air Commodore Steve Roberton, as reported in the Newcastle Herald on 30 September, that Defence accepted that it would be paying compensation (<http://www.theherald.com.au/story/3394545/defence-to-blame-so-it-should-pay-base-boss/>):
 - (a) Is this Defence's formal position?
 - (b) What procedures does Defence have for the seeking and granting of compensation?
- (4) Is compensation being considered for other stakeholders affected by the contamination? (E.g. Business, property value, reputation) as sought by local residents including those who visited Parliament last week?
- (5) Do compensation plans extend to those who have suffered economic loss through not being able to use bore water on their properties, and instead having to purchase town water?

- (6) What is the timeframe around granting compensation?
- (7) Formal compensation procedures can be time consuming and complex – is Defence considering in other types of financial assistance, such as ex gratia payments?
- (8) Has Defence considered meeting the expense of connecting residents not already on town water to the available supply?
- (9) How is Defence or the relevant agency making sure that those potentially affected are being proactively advised of what their options are?

Answer:

- (1) - (2) The scheme is administered by the Department of Human Services. Any questions regarding the number of applications received and processed should be directed to the Department of Human Services.
- (3) - (9) Please see response to the 21 October 2015 Supplementary Budget Estimates Question on Notice No. 97.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia – 3 December 2015 ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Testing for contamination in the areas surrounding affected facilities

Question reference number: 2

Senator: Gallacher

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question: Testing for contamination in the areas surrounding affected facilities:

- (1) Is Defence helping communities test their properties?
- (2) In the case of Oakey, Defence has advised residents in the contaminated area to not drink water – Defence's website states (<http://www.defence.gov.au/id/oakey/>): "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." How long does Defence expect this advice to be in place for?
- (3) Has Defence provided this advice to the residents near any other ADF facilities?
- (4) What current processes does Defence have in place to determine what the health risks are, and how are these being communicated to those who may have been affected?
- (5) Is there a systematic procedure involving health experts looking into this, with the aim of providing some greater certainty?
- (6) Are there procedures for regular medical checks?
- (7) What medical advice is being given to people who may have been affected by the contamination?
- (8) Will any human testing be undertaken – either of ADF personnel or of residents in the surrounds of the Base?

- (9) What processes are in place for advising those who have now left the ADF but were exposed to the contaminants – including families of children who previously attended the on-base child care centre?
- (10) Reports indicate that some testing has been carried out at areas surrounding ADF facilities to determine the extent of the contamination. With respect to this testing, could Defence please outline:
- (a.) What methodology is being used to define which properties are being tested within the defined 'Red Zone' of the contamination – and has the 'Red Zone' been enlarged?
- (11) In regard to the situation at Williamstown, reports indicate that concurrent testing is being undertaken by both the NSW EPA and Defence, on different established 'Red Zones' – why are Defence and the NSW EPA undertaking different testing in different zones?
- (12) Effective cooperation between Defence and NSW agencies like the EPA is clearly critical. There is a report in the Newcastle Herald of 2 December that Since October 7 the state's Environmental watchdog has been asking Defence to let the Expert Panel's water specialists do an on-site inspection at the base. But the EPA says Defence "has not yet allowed onsite access to the base" Is this true?
- (13) If so why has Defence not yet given access to the Expert Panel?
- (14) What is being tested – for example, does it include bore water, ground water, soil, surface water and animals (both stock and domestic)?
- (15) Will Defence agree to community demands for all bore water, surface water and soil to be tested on the properties in the defined 'Red Zone'?
- (16) Can Defence confirm that it will meet the cost of all testing undertaken by both its contractors as well as any testing assessed as necessary by the New South Wales EPA?

Answer:

(1) – (11) and (14) – (16) Please see response to 21 October 2015 Supplementary Budget Estimate Question on Notice No. 96.

(12) and (13) This site visit occurred on 17 December 2015.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Consultative and expert groups to manage the contamination situation

Question reference number: 3

Senator: Gallacher

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) Please provide a full description of each of the groups, including their membership and community representation.
- (2) How are community representatives selected or made known?
- (3) Was there consideration of including local MPs, either State or Federal, on the advisory group established to respond to the situation?
- (4) Members of Parliament have been receiving large amounts of community contact regarding the situation. What mechanisms are in place for Members of Parliament to feedback community concern and take part in addressing the situation?

Answer:

Please refer to the Supplementary Budget Estimates answer 98.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Health of surrounding residents and ADF personnel

Question reference number: 4

Senator: Gallacher

Type of question: Written

Date set by the committee for the return of answer: 17 December 2015

Question:

Questions on Notice to the Department of Defence - The health of residents in surrounding areas and those who might have been affected, including serving and retired ADF personnel who served at these facilities in the past:

- (1) How many current and former ADF personnel were exposed to the foam?
- (2) How many contractors were exposed to the foam?
- (3) How were these people exposed to the foam?
- (4) There have been media articles in the Toowoomba Chronicle reporting that military medics were drenched in the foam during training exercises (<http://www.thechronicle.com.au/news/a-retired-army-medic-is-angry-he-wasnt-told-of-hea/2556072/>).
 - (a) Are these articles accurate?
 - (b) Is this practice still continuing, but with different foams?
 - (c) Has medical testing been made available to these personnel?
 - (d) What is the process for them to have tests carried out – do they need to contact the ADF or is the ADF seeking them out?
 - (e) Is compensation being offered to people with health issues caused by this product?
- (5) Reports of inconsistency between Defence and EPA advice to residents:
 - (a) There was a report stating “After a harrowing wait, they, along with 13 other property owners, received letters from Defence last week advising them there was nothing detected in their water to be concerned about. But it has emerged this seemingly rare good news comes with a caveat. The Environment Protection Authority reissued on Friday [23 October] its precautionary advice to residents in the contamination zone not to drink their bore water or prepare food with it, or eat eggs from backyard chickens.” (<http://www.theherald.com.au/story/3448752/toxic-truth-water-warning-repeated/?cs=305>)
 - (b) Why is such radically different advice being issued?

(c) Have Defence and the EPA now agreed on a common approach?

Answer:

(1) – (5) Please see response to 21 October 2015 Supplementary Budget Estimates Question on Notice No. 95.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australian Defence Force Facilities and other
Commonwealth, State and Territory Sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Containment, remediation and potential further contamination

Question reference number: 5

Senator: Gallacher

Type of question: Written

Date set by the committee for the return of answer: 17 December 2015

Question:

Questions to Department of Defence - Containment, remediation and potential further contamination:

- (1) What has Defence done to contain the contamination and to prevent any further contamination of groundwater, surface water and soil?
- (2) Does Defence intend to do any remediation of the sites, either on base or in the surrounding area?
- (3) Is Defence aware of any other sites affected by PFOS and PFOA contamination that have been successfully remediated?
- (4) Does Defence have any estimates of how long remediation could take at each facility?
- (5) RAAF Base Williamtown is undergoing significant redevelopment. Has the soil and water contamination been considered in planning of works and work already commenced for extension of the runway?
- (6) In regard to RAAF Base Williamtown, does Defence have any plans in their upgrades to repair stormwater drainage systems which allegedly spread the contaminants faster and further than groundwater?
- (7) Did Defence disclose this contamination when they were submitting EIS for the proposed upgrades at Williamtown? If not, why not?
- (8) Will Defence work with Hunter Water to ensure the integrity of Newcastle's water supply?
- (9) How about at Oakey – has there been any redevelopment work there of late?
- (10) Are workers on these building sites safe from exposure to these chemicals?
- (11) Have any other sites that used these foams been redeveloped recently or plan to be in the future?

Answer:

(1)-(5) and (9)-(11) Please see response to 21 October 2015 Supplementary Budget Estimates Question on Notice No. 94.

(6) RAAF Base Williamtown is very flat and has very porous soils; as such no significant volumes of stormwater runoff are generated from the project areas. In accordance with agreement with local authorities, projects are undertaking works, such as the construction of detention basins to ensure that the current flow of water leaving the base is not increased.

Defence contributed approximately \$168,000 to the Port Stephens Council to assist with flood mitigation measures in the Moors Drain in the vicinity of Lemon Tree Passage Road.

Defence, Hunter Water Corporation, and the Port Stephens Council are members of the Storm Water Drainage Working Group.

(7) Guidelines issued by the federal Department of the Environment determine the contents for an Environmental Impact Statement. The EIS was not required to provide information about legacy contamination issues.

The EIS guidelines required Defence to report about the effects of aircraft emissions on water catchment areas, domestic rain water tanks supplying household water, and on everyday activities (e.g. on clothes drying and swimming pools).

(8) Yes, Defence has been working closely with Hunter Water since 2012.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Issues of public safety and the health and wellbeing of ADF personnel, their families and residents living in close proximity to the affected facilities

Question reference number: 6

Senator: Gallacher

Type of question: Provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) Is Defence aware that in 2004, US company DuPont reached a settlement with residents who claimed they became ill after PFOA from a plant at Parkersburg West Virginia contaminated their drinking water supply?
(<http://mobile.abc.net.au/news/2015-10-02/us-lawsuit-may-impact-australian-communities-with-contamination/6821674?pfm=sm&site=newcastle>)
- (2) Is Defence aware that DuPont also agreed to set up an independent panel to study the effect of PFOA on people?
- (3) It is reported that the panel found six possible health issues linked to the chemical including kidney and testicular cancer and thyroid disease. What is Defence's view on this finding?
- (4) Is Defence aware that on 7 October a US jury awarded a plaintiff \$1.6 million, ruling that PFOA from a DuPont plant contaminated drinking water and contributed to her development of kidney cancer?
(<http://www.theherald.com.au/story/3420585/payout-for-cancer-victim-exposed-to-leaked-chemicals/?cs=305>)
- (5) Has Defence assessed the bearing this case has on Australian Defence facilities?

Answer:

(1) Defence is aware that the class action in relation to DuPont litigation commenced in 2004 relating to people who lived in the contaminated area and drank water for at least one year following December 2004. The science advisory panel which was set up as part of that research completed its work in 2012 and the results of that study were published in 2013.

(2) Yes – the C8 Science Panel.

(3) It is Defence's understanding that the possible impact on human health of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) is unknown.

Defence has answered the question in the hearing. Senate Hansard records the complete response on page eight of the Senate Foreign Affairs, Defence and Trade References Committee *Contamination caused by firefighting foams at RAAF Base Williamtown and other sites*.

(4 and 5) Please see response to 21 October 2015 Supplementary Budget Estimates Question on Notice No. 95.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Legal standing of NSW Government agencies with respect to RAAF
Williamtown

Question reference number: 7

Senator: Gallacher

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) What is the Department of Defence's position on their legal obligations under relevant NSW legislation, for example the Protection of the Environment Operations Act 1997?
 - (a) Does Defence consider it would be obliged to comply with 'clean-up' notices issued by the EPA requiring it, as reasonably suspected of causing or having caused pollution, to take clean-up action specified in the notice?
 - (b) Has the EPA issued such a notice to the Department?

Answer:

Defence has not received a Clean-Up Notice from the NSW EPA. The legal effect of such a notice will be considered if one is received.

Defence operates under Federal Environmental legislation. Defence also seeks to comply with the intent of State or Territory Environmental legislation.

Senate Standing Committee on Foreign Affairs, Defence and Trade

**Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015**

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Information on PFOS and PFOA

Question reference number: 8

Senator: Gallacher

Type of question: Written

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) What are PFOS and PFOA, and what are they used for?
- (2) How was the foam used?
- (3) Who, typically, used these foams?
 - (a) Was it only ADF personnel, or did contractors, working with the ADF, use the foam?
- (4) When were these chemicals used?
- (5) Which facilities were they used in?
 - (a) Was it all Defence facilities, ADF air fields or all facilities that have a fire fighting unit?
- (6) What is the extent of the contamination within ADF facilities and the areas surrounding them?
- (7) What are the health issues associated with PFOS and PFOA?
- (8) Who do the health issues affect?
- (9) When did Defence first become aware of the health issues associated with the use of PFOS and PFOA?
- (10) What actions did Defence undertake to address the situation when it became aware of the contamination?
 - (a) When did Defence stop using material containing PFOS and PFOA?
 - (b) Who did Defence inform and when?
- (11) Can Defence please outline the process by which the extent of the contamination both within the ADF facilities, and outside of them, became known?
- (12) Can Defence please outline the timeline of events that have taken place since the discovery of contamination?
- (13) Does Defence still have any firefighting foams that contain PFOS and/or PFOA in stock at any of its facilities?
 - (a) If so, for what purpose?
 - (b) If firefighting foam containing PFOS and PFOA is no longer used:
 - (i) What foams are used for firefighting purposes now?

(ii) Is Defence aware of any concerns about the current firefighting foams being used?

Answer:

(1)- (13) Please see response to 21 October 2015 Supplementary Budget Estimates Question on Notice No. 93.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia – 3 December 2015 ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Defence's formal position on compensation

Question reference number: 9

Senator: Rhiannon

Type of question: asked on Thursday, 3 December 2015, Hansard page 5

Date set by the committee for the return of answer: 17 December 2015

Question:

Senator RHIANNON: Thank you, Deputy Secretary. I would just like to start with the issue of compensation. I am not asking about the financial assistance package. Considering that local people have suffered a loss of income, a downturn in business and a drop in property values, has there been consideration of compensation to people—particularly the people in the red zone?

Mr Grzeskowiak: I agree: the issue of compensation is a separate issue to that of the financial assistance package, which was put in place for those fishers that are unable to conduct their business because of a restriction on their ability to fish; that has been put in place by a New South Wales government agency. The issue of compensation is complex. It is an issue that needs to be taken as the full impact of this issue emerges over time. It is probably too early to be discussing any compensation in detail.

Senator RHIANNON: My question actually was: has any consideration being given to that? Specifically, has your department given any advice to the minister? Have there been internal discussions? Has it been moved to another department? So are there discussions going on?

Mr Grzeskowiak: I cannot talk about advice that we may or may not have given to the minister. We are aware of a community expectation that there might be compensation, but I cannot comment on what the government might decide in due course.

Senator RHIANNON: No, I was not asking as to government. Have there been internal discussions? Where you are sharing information about issues to do with contamination and how this is being managed, as one of those issues, is there internal discussion? I acknowledge you have said it is complex; we understand that. But is it actually being talked about? Are you seeking options or, when you meet, is it just not on the agenda? I am just trying to find out: is it part of your consideration?

Mr Grzeskowiak: I might ask Michael Lysewycz to comment on this question.

Mr Lysewycz: Matters of compensation of this kind often come to my office to be dealt with. Internally with my staff we are having discussions. We are looking at different ways of potentially dealing with claims for compensation as they come through. As Mr Grzeskowiak mentioned, it is pretty early in the piece to look at a

range of compensation measures in the theoretical level. We read and sympathise with the statements by community members who are apprehensive about suffering loss. When it comes to compensation, there are different ways in which people may suffer loss. We will have to look at each one of those to establish potential liability and actual loss and see how that can be redressed. In other cases, we have been particularly responsive to claims as they come through. We do not shy away from the responsibility—the Commonwealth does not—but there are certain thresholds that have to be passed before we can actually pay money out of the public purse.

CHAIR: Can I just get a clarification here? With regard to the public declaration by the commander of RAAF Williamtown, Air Commodore Steve Robertson, as reported in the Newcastle Herald on 30 September, that Defence accepted that it would be paying compensation, is this Defence's formal position?

Mr Grzeskowiak: No, that would not be Defence's formal position.

CHAIR: Your commanding officer has made a statement. Is that statement incorrect? Has it been withdrawn?

Mr Grzeskowiak: I think the statement may have been reported incorrectly. I do not have a copy of that Herald article with me. We acknowledge that we have put this contaminant into the environment. There is no doubt about that. And we are taking steps to, initially, ensure that drinking water is provided to those people who have no other source of drinking water, where their drinking water source shows elevated levels of PFOS or PFOA. The government has put in place a financial assistance package for those people who cannot transact their fishing business because of the fishing ban put in place by the relevant authorities.

Senator RHIANNON: Deputy Secretary, as we are short of time can we just stick with the compensation? That was what both the chair and I were pursuing. If you are not aware, could you take it on notice if the statement that Senator Gallacher has just read out is accurate and if that is the position? It is actually a very clear statement. Could you take that on notice, please?

Mr Grzeskowiak: I can take it on notice, but, if the Herald has reported that as read, it is not the departmental position that we accept that compensation will be payable. The point I was trying to make then was that we are investing in helping people with drinking water, we are investing in further testing, we are looking at remediation options and we will not shy away from our responsibility to try and clean up the contaminant, if that is possible, and help people through this.

Senator RHIANNON: The way you answered that question, though, does sound as though you are shying away from compensation. That is why I am providing the opportunity for you to answer that. You have given us information, but, considering the question was about compensation, when you do not answer that aspect it sounds like you are shying away from that. I am happy for you to speak about compensation, but I do also have a question for your lawyer. Can you answer specifically on your position on compensation?

Mr Grzeskowiak: We will take that on notice, as you offered.

Answer:

Defence is continuing its environmental investigations in accordance with the National Environmental Protection (Assessment of Site Contamination) Measure. It is too early to form a view as to liability associated with any contamination.

In the event that any business or individual wishes to make a claim against the Commonwealth for compensation for losses suffered as a consequence of actions by the Commonwealth, such claims will be handled in accordance with obligations set out in the Attorney-General's Legal Services Directions.

Claims, supported by relevant information, may be submitted by email to dl.specialcounsel@defence.gov.au

Claims submitted by mail may be directed to:

Defence Special Counsel
Defence Legal
Department of Defence
CP2-4-061
Campbell Park Offices ACT 2600

Separately, applications may be made to Centrelink in respect of the financial assistance package announced by the Government on 4 November 2015 for eligible individuals and businesses affected by the closure of Hunter River and Port Stephens fisheries near RAAF Base Williamstown. Details on eligibility for each scheme and how to apply are available at www.humanservices.gov.au/centrelink or by calling 180 23 22.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia – 3 December 2015 ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: ADF facilities and the use of PFOS and PFOA

Question reference number: 10

Senator: Gallacher

Type of question: asked on Thursday, 3 December 2015, Hansard page 4

Date set by the committee for the return of answer: 17 December 2015

Question:

CHAIR: If you want to take on notice this last point you can: how many other ADF facilities have been associated with the use of PFOS and PFOA, and has Defence done testing and has Defence consulted any other communities potentially affected by PFOS or PFOA contamination? I am happy for you to take that on notice.

Mr Grzeskowiak: We will take that on notice, and we will seek to perhaps include a response to that in our written submission to this committee.

Answer:

In order to determine areas possibly affected by PFOS and PFOA contamination, Defence has undertaken a review of its estate and historical practices. This has determined which properties and areas surrounding them require further investigation and assessment.

Following a Defence estate-wide desk top review of Aqueous Film Forming Foam (AFFF) use, 16 sites have been identified as a priority for further investigation (Category 1 Properties). These sites have been selected based on Defence's understanding of how AFFF was used at each site and any information known about water use and hydro-geology in the area. This is based on the information Defence has up to this point. We will continue to review as we better understand the nature of this emerging contaminant.

Defence will undertake community consultation as it conducts environmental investigations at other bases.

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australian Defence Force facilities and other Commonwealth, state and territory sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Outcomes of the 2013 Environmental Health Perspective Study

Question reference number: 11

Senator: Back

Type of question: asked on Thursday, 3 December 2015, Hansard page 8

Date set by the committee for the return of answer: 17 December 2015

Question:

Senator BACK: Can I continue on with the questions with regard to health. Thank you, Dr Gardner, you have answered some of them. Are you able to summarise briefly or perhaps provide on notice what the outcomes were of the environmental health perspective publication in late 2013?

Dr Gardner: I could provide a limited answer and then, if necessary, we can provide further. This study was done as part of a court process. Three independent science examiners were selected by the parties. The study was a community based study looking at what were the prevalence rates—meaning the number of cases of particular cancers and health conditions—in the identified exposure area. They found an association, but I stress the word 'association'. It was not necessarily a causation between a range of health conditions including a suggestion of increased rates of cancers in the testes, thyroid issues, problems to do with increased liver disease, cholesterol and triglyceride issues. In their study that was associated with exposure, however, there was no matched control group. This study has never been peer reviewed and accepted in global literature studies. The parties basically made a commercial decision to accept the findings and move on. So yes there is a study there, but it is not a globally-good study. If you want globally-good studies, I have some references here which I can give you today.

Answer:

Defence has answered the question in the hearing. Senate Hansard records the complete response on page eight of the Senate Foreign Affairs, Defence and Trade References Committee, *Contamination caused by firefighting foams at RAAF Base Williamtown and other sites*.

Foreign Affairs, Defence and Trade References Committee

Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia – 3 December 2015 ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Testing at RAAF Williamtown

Question reference number: 12

Senator: Rhiannon

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) When was Williamtown RAAF Base first tested for perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) contamination?
- (2) What was the result of those tests?
- (3) Who was informed about the test results?
- (4) How often has the Base been tested for these chemicals? Please supply the date of the test, what was found and who was informed about the tests.

Answer:

Response: Questions (1) – (4).

Williamtown Timeline of Events pre-detection of PFOS and PFOA

The GHD (Stage 1 Report - 2013): Section 3.3.1 (Historical Investigations) reported that Methylene Blue Active Substance (MBAS) testing was utilised between 1999 and 2001 to detect AFFF related impact in groundwater and surface water.

MBAS is a low sensitivity screening test for the presence of anionic surfactants. The test cannot distinguish between the types of surfactants (including fluorinated surfactants containing PFOS and PFOA).

There were no available laboratory methods / technical grade standards to undertake testing for PFOS and PFOA in Australia in 1999. The first US EPA Analytical Method for PFCs was dated September 2008. Australian Laboratory Services (ALS) started testing for PFOS and PFOA in June 2009.

Williamtown Timeline of Events Post-detection of PFOS and PFOA

2009	Environmental investigations by CRC Care identify PFOS PFOA contaminated soil and in biota on site	Helen Horn email of 10/9/09 Environmental investigations by CRC Care identify PFOS PFOA contaminated soil around the fire training facilities and in biota from samples collected on site at Williamtown
December 2011	PFOS and PFOA monitoring on base GHD2011 External monitoring report	Routine Monitoring includes testing for PFOS and PFOA. Monitoring finds two elevated detections on base.
March 2012	PFOS and PFOA monitoring on base and at boundary confirms PFOS exiting the base	Defence commissioned GHD Report
March 2012	PFOS and PFOA monitoring on base and at boundary confirms PFOS exiting the base	<p>Surface Water Samples collected in March identify elevated levels of PFOS in water leaving the base.</p> <p>GHD report of surface water results first quarter 2012 (note this is a different report to the one indicated above)</p> <p>Results from routine monitoring finds elevated levels at 8 out of 12 locations on base and elevated levels in storm water exiting the base.</p>
10 May 2012	Meeting with EPA	Defence sent the EPA an email on 2 May 2012 advising of surface water detections off site. On 10 May 2012, EPA is verbally advised of PFOS/PFOA elevated detections in surface water and that a detailed Stage 1 contamination investigation is to be undertaken
May 2012	NEPM Stage 1 commences	<p>RAAF Williamtown and Salt Ash Weapons Range Stage 1 AFFF investigation commences</p> <p>Report completed March 2013</p>
20 January 2013	EPA is of contaminated effluent lagoons on land leased by Defence	EPA is notified of AFFF-related contamination at effluent lagoons and reports are attached
28 March 2013		EPA requests formal advice on Defence's management strategy for the contamination

17 May 2013	EPA is sent response to their letter attaching a copy of Stage 1 report	<p>Stage 1 report is completed in March 2013</p> <p>A copy is sent to EPA on 17 May 2013</p> <p>Stage 1 identifies potential contamination risks on the base such as the locations of former fire training facilities known to have been extensively used over a period of years. The report provided recommendations for further sampling and analysis and was used to inform the scope of the Stage 2 investigation.</p>
May 2013	Contractor goes into liquidation	The Technical Adviser engaged to assist in scoping the Stage 2 National Environment Protection Measures (NEPM) (Site Contamination Assessment) Environmental Investigation goes into liquidation. A new consultant is required.
August 2013	Procurement process for new Contractor commences	
March 2014	Contractor engaged	
April 2014	NEPM Stage 2 Environmental Investigation Commences	
May 2014	On site investigations	Sampling on site commences
September 2014	Letter to EPA (and stakeholders)	<p>EPA advised of URS engagement for Stage 2. Regional Manager – Graham Clarke.</p> <p>Stakeholders: Hunter Water Corporation; NSW EPA; Port Stephens Council; Department of Primary Industries (Office of Water); NSW Health (Hunter New England District); Newcastle Airport Limited; NSW Office of Environment and Heritage</p>
October 2014	<p>Public Website established</p> <p>Letter to EPA (and stakeholders)</p>	<p>Site included: Flyer of drilling activities, FAQs, overview of project.</p> <p>EPA - Adam Gilligan – Newcastle office advised of commencement of drilling and sampling program. Location map of proposed wells and FAQ provided as attachments.</p> <p>Stakeholders: Hunter Water Corporation; NSW EPA; Port Stephens Council; Department of Primary Industries (Office of Water); NSW Health (Hunter New England District); Newcastle Airport Limited; NSW Office of Environment and Heritage</p>

November 2014	Sampling and Drilling commenced off site	Total sampling on and off site: 185 groundwater samples 20 surface water samples 230 soil samples 35 sediment samples 30 vegetation samples 18 biota samples
14 May 2015	Stage 2 Project Technical Workshop	URS provides a verbal overview to Defence of preliminary data, indicating contamination on and off site. This data had not been quality checked or technically verified by the Technical Advisor at this time.
9 June 2015	Extract of preliminary Data received.	This data had not been quality checked or technically verified by the Technical Advisor. Hunter Water is provided preliminary sampling results relevant them.
12 June 2015	Letter sent to Hunter Water Corporation (HWC) with ground water preliminary data extract	Included preliminary data relevant to Hunter Water's operations.
3 August 2015	Draft Stage 2 Environmental Investigation report received in Defence	Draft Report is one that has been quality checked and technically verified by the Technical Advisor ready for client and stakeholder comment. Results are confirmed in terms of elevated levels being detected on and off site
4 August 2015	Draft Stage 2 Environmental Investigation report sent to stakeholders. Defence notification via email to stakeholders.	Defence emails: Hunter Water Corporation; NSW EPA; Port Stephens Council; Department of Primary Industries (Office of Water); NSW Health (Hunter New England District); Newcastle Airport Limited inviting them to a meeting on 12 Aug to discuss attached report and next steps. Provided proposed Power Point presentation to be provided to community on 2 Sep 2015. Requested comments by 21 Aug 2015.
12 August 2015	Stakeholder meeting	Attendees, as above (except for NSW Health). Sought comments by 4 September 2015
3 September 2015	NSW Government and Defence	NSW Government and Defence teleconference to discuss latest findings

	teleconference	
3 September 2015	EPA issues press release - Fishing Closures	This followed a NSW Government / Defence teleconference covering this matter on 3 September 2015.
16 September 2015	Community meeting with EPA	Defence held a community consultation forum with people from the Williamtown area to advise that PFOS/PFOA contamination had been detected off base. Officials from NSW departments of health and primary industries, the NSW Environment Protection Authority, and Hunter Water Corporation (local water provider) participated in the forum.
1 October 2015	Defence attends inaugural Williamtown Contamination Investigation Community Reference Group meeting	
8 October 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	
15 October 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	
16 October 2015	Defence attends community information session held at Salt Ash Public School	
22 October 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	
26 October 2015	Stage 2B Environmental Investigation	Defence commenced Stage 2B of its Environmental Investigation. Over 900 samples are expected to be collected, along

	Commenced	with completion of a Human Health Risk Assessment and an Ecological Risk Assessment.
29 October 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	
5 November 2015	Defence attends community information session at Fern Bay Hall.	
12 November 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	
19 November 2015	Defence attends community information session at Salt Ash Public School	
26 November 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	
3 December 2015	Defence attends community information session at Salt Ash Public School	
10 December 2015	Defence attends Williamtown Contamination Investigation Community Reference Group meeting	

Senate Standing Committee on Foreign Affairs, Defence and Trade

Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Contamination of infrastructure at RAAF Base Williamtown

Question reference number: 13

Senator: Rhiannon

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) Is the runway, hangar or any other infrastructure that will be associated with or used by the Jet Strike Fighter on land contaminated by the chemicals? If so please indicate what infrastructure covers contaminated land.
- (2) If any infrastructure does cover contaminated land was it built after the contamination was detected?

Answer:

(1) The Joint Strike Fighter (JSF) project team became aware of PFOS and PFOA contamination across RAAF Base Williamtown in August 2015 through the draft URS Stage 2 Environmental Investigation report.

The Project's Environmental Impact Assessment – Contamination Assessment noted the potential for low level AFFF contamination within or adjacent to the Base operational areas.

As no published national or Defence criteria were available at the time of writing the Contamination Assessment, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) acceptance criteria developed by the Minnesota Department of Health were adopted.

The Contamination Assessment soil testing found all samples from the JSF precinct area were below adopted PFOS acceptance criteria.

Contamination Assessment water testing detected PFOS concentrations above the adopted acceptance criteria in one sample within the JSF Precinct Area. All other samples were found to be below the limits of reporting for PFOS and PFOA.

The construction phase soil and water testing conducted by the project also showed low level ground water concentrations of PFOS in areas around the new JSF Precinct at the end of July 2015.

(2) Yes.

The Project has engaged environmental consultants, Environmental Earth Sciences (EES), to conduct soil and water testing across the JSF project area.

Soil testing ahead of bulk earthworks in the JSF Precinct and SE runway area has identified very low level PFOS / PFOA contamination in 85% of soil samples. Where PFOS/PFOA is detected in soil across these areas, the concentrations are all below the human health – residential and the Ecological (terrestrial) interim screening criteria as set out in, Defence Contamination Directive #8 - interim screening criteria for PFOS, PFOA, 6:2 FTS - May 2015 (DCD#8).

The earthworks on the project are mainly stripping of topsoil to get down to stable ground suitable for construction. Excavation for this work is typically down to 300mm only.

Stockpile locations and soil management procedures are being used.

In the areas where the groundwater PFOS concentrations is found to exceed the DCD #8 Drinking Water interim screening criteria specialist contractors have been engaged to treat groundwater encountered in these areas.

The ground water is treated to drinking water screening level and then re-injected into the environment.

Foreign Affairs, Defence and Trade References Committee

Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia – 3 December 2015 ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: RAAF Base Williamtown Testing of Staff and Relatives

Question reference number: 14

Senator: Rhiannon

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

- (1) Have any staff or any relatives of staff at the base been tested for these chemicals?
If so what were the results? Were the people tested informed? Who else was informed?
- (2) Have any former staff or any relatives of former staff at the base been tested for these chemicals? If so what were the results? Were the people tested informed? Who else was informed?
- (3) If testing was carried out what type of test was it?

Answer:

(1) – (3) Defence has not arranged for its base personnel or any relatives of personnel at the base to have their PFOS or PFOA levels tested.

The NSW Government has stated that '[while] blood tests can provide a measure of PFOS, they are not recommended because they don't predict level of health risk.'

Foreign Affairs, Defence and Trade References Committee

Contamination of Australia's Defence Force facilities and other
Commonwealth, state and territory sites in Australia – 3 December 2015
ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Delineation of the Red Zone

Question reference number: 15

Senator: Rhiannon

Type of question: provided in writing

Date set by the committee for the return of answer: 17 December 2015

Question:

(1) What were the criteria used to delineate the Red Zone or the Hot Zone from the surrounding area?

Answer:

(1) At Williamstown, as the "Investigation area" was set by the NSW Environmental Protection Authority, questions on this should be directed to the NSW Environmental Protection Authority.