



WILLIAMTOWN CONTAMINATION CHRONOLOGY

This chronology records the governmental response to the Williamtown contamination since 2012. It should be read subject to the following:

- For the period between 2012 and 3 September 2015, the chronology is detailed for EPA entries, and for Hunter Water, it is selective based on significant or milestone actions given multiple minor communications in that period between Hunter Water and Defence.
- From 3 September 2015, owing to the scale of the response by the NSW Government since potential exposure pathways were identified, only the more significant or milestone actions are recorded.
- This chronology has been prepared using best efforts to identify and record relevant material. Given the timeframe in which it was collated, involving record-searching within several different NSW agencies, there may be some relevant items yet to be identified that have not been included in the chronology. Updates to this version may occur.

Abbreviations

GOVERNMENT AGENCIES / COMMITTEES

Defence	Department of Defence
DPC	NSW Department of Premier and Cabinet
DPI	NSW Department of Primary Industry
enHealth	Environmental Health Standing Committee
EPA	NSW Environment Protection Authority
HNELHD	Hunter New England Local Health District
Hunter Water (or HWC)	Hunter Water Corporation

WILLIAMTOWN-SPECIFIC GROUPS

CRG	Williamtown Contamination Investigation Community Reference Group
ERG	Williamtown Elected Representatives Reference Group

Expert Panel

RAWG	Williamtown Contamination Expert Panel Risk Assessment Working Group
WWG	Williamtown Contamination Expert Panel Water Working Group

OTHER

STP	Williamtown RAAF Base and Newcastle Airport Sewage Treatment Plant
PFOA	Perfluorooctanoic acid (PFOA)
PFOS	Perfluorooctane sulfonate
CLM Act	<i>Contaminated Land Management Act 1997 (NSW)</i>
Stage 1 Report	Conceptual Site Model for AFFF Contamination
Stage 2 Report	Draft URS Report titled <i>Stage 2 Environmental Investigation AFFF PFAS, RAAF Base Williamtown, Williamtown NSW</i> dated 3 September 2015
VMP	Voluntary Management Plan under section 14, CLM Act

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
2012				
1	29/02/2012 RAAF Base Sewage Treatment Plant	Action by: EPA <ul style="list-style-type: none"> Provides information to the Minister for the Environment Robyn Parker on media reports of contamination risk to Newcastle's water supply from the Williamtown RAAF base sewage treatment system (media report dated 06/02/2012). 		Williamtown RAAF Base and Newcastle Airport Sewage Treatment Plant (STP) <ul style="list-style-type: none"> Response to media reports concerning the STP (not regulated by EPA) operated by Spotless under contract. This media article related to alleged impacts by sewage and was not related to PFOS The EPA understands that the STP on the Williamtown RAAF base was constructed around the 1950s, servicing the RAAF base and Newcastle Airport. Hunter Water has no involvement with the operation or maintenance of the STP infrastructure. Commonwealth airport infrastructure may be regulated under the Commonwealth Airports (Environment Protection) Regulations 1997.
2	21/03/2012	Action by EPA EPA (Director North) responds to community representation dated 24 February made to the Minister for the Environment Robyn Parker		
3	01/05/2012	<ul style="list-style-type: none"> 	Defence email to Hunter Water advising of monitoring report showing PFOS/PFOA contamination at groundwater and surface water monitoring locations on the base.	
4	02/05/2012 PFOS onsite contamination – first contact		Email to EPA (Manager Hunter Region) requesting confidential meeting to discuss recent results from its onsite water monitoring indicating elevated levels of PFOS at RAAF Base Williamtown, including stormwater leaving the Base.	
5	10/05/2012	Action by: EPA		

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	NSW Government	Department of Defence	
EPA first request to Defence – further information / stakeholder notification	<ul style="list-style-type: none"> • EPA meets with Defence - Defence provides verbal advice about potential contamination issues on the base, but no written advice disclosed on the basis that the reports did not have ‘clearance for release’. • EPA requested: <ol style="list-style-type: none"> a. Defence to provide data and reports to the EPA as soon as possible b. Defence to urgently notify Hunter Water, Port Stephens Council, the media, the community and other stakeholders. 		
6 17/05/2012	Action by: EPA <ul style="list-style-type: none"> • EPA (Manager Hunter Region) contacts Hunter Water Corporation (HWC) to ensure they are aware of the situation. • EPA (Manager Hunter Region) recorded that ‘HWC has received a briefing on the issue from RAAF staff and at this stage of the investigation HWC does not consider the water supply bores to be at risk of contamination.’ 		
7 22/05/2012	Action by: Hunter Water Hunter Water tests for PFOS/PFOA in all Hunter Water bores in the Tomago sandbeds with nil detects		

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8	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
	29/06/12	<p>Action by: EPA EPA spoke to Defence environment manager and was advised Defence only had preliminary results for some samples and not all results were back yet. The EPA was advised separate consultants have been engaged by Defence to conduct the sampling and provide technical advice</p>		
2013				
9	20/01/2013		<p>Letter to EPA advising:</p> <ul style="list-style-type: none"> • A contaminated land assessment of the STP precinct completed. This related to the notification under the <i>Contaminated Land Management Act, 1997</i> (CLM Act) of the site the STP discharges to under Commonwealth covenant. • Two reports completed on 07/09/2012 attached to the letter. The report identifies groundwater contaminated with PFOS and PFOA on land controlled by the Commonwealth. • Defence notes it will be undertaking a separate investigation 	

PFOS groundwater contamination on STP precinct land

– first official advice from Defence

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
			to determine the source and extent of PFOS/PFOA contamination across the RAAF base.	
10	28/03/2013 EPA second request to Defence – noting lack of information, requesting further information / stakeholder notification	Action by: EPA EPA (Manager Hunter Region) letter to Defence: <ul style="list-style-type: none"> Notes that information provided by Defence to date on PFOS/PFOA contamination has been broad, with no formal advice on levels recorded/actions taken to assess/manage contamination. Requesting Defence investigations to be undertaken as a high priority and requests further information by 30/04/2013. Advising that information is to include actions taken to provide notification to potential down-gradient receptors with regard to water quality; summary of testing; proposed mitigation/management measures including implementation date; Requesting that Defence provide advice on any notifications that have been made to Commonwealth Environment Department and public health authorities. 		
11	17/05/2013 Defence provides Stage 1 report		Letter of response from Defence to EPA letter of 28/03/2013: <ul style="list-style-type: none"> Attaches Stage 1 Report (Conceptual Site Model for AFFF 	Reissue of letter from Defence to OEH on 20/05/2015 (summarized version of letter above dated 17/05/2015) – confusion regarding name change from OEH to EPA.

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	NSW Government	Department of Defence	
		<p>Contamination), noting on and off-site drain and sediment impact and biota on-site but no off-site groundwater impact.</p> <ul style="list-style-type: none"> • Advises Stage 1 report also sent to Port Stephens Council and other NSW Government agencies (but not to NSW Health.) • Advises the report has not been sent to federal Department of Environment as the current evidence and understanding of the issue is determined not to cause a significant impact to the environment under the federal EPBC Act. • Stage 1 investigation identified the extent of PFOS was not well understood due to lack of systematic sampling. Data gaps identified as significant and hence the risks posed by PFOS & PFOA contamination as difficult to assess. • Stage 2 investigation proposed to commence early in the 2013/14 	

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		NSW Government	Department of Defence	
			<p>financial year and expected to be completed in mid-2014. Stage 2 will do further onsite and offsite monitoring of soil, groundwater, water, sediments and biota (oysters from Tilligerry Creek and fish, crustaceans, frogs etc.) Stage 2 to quantify extent of PFOS/PFOA contamination at RAAF Williamtown and land/environment adjacent to the base.</p>	
12	20/05/2013		<p>Defence advises NSW Office of Water of 'onsite' contamination at RAAF Base Williamtown. Offsite groundwater samples taken by Department of Defence as part of the Stage 1 investigation indicated that no detectable PFOS levels had been found.</p>	<p>Offsite groundwater samples taken by Department of Defence as part of the Stage 1 investigation indicated that no detectable PFOS levels had been found. Contamination remains on-site, no further action required by Office of Water at this time.</p>
13	22/05/2013		<p>Hunter Water receives the 'RAAF Williamtown Stage 1 – Conceptual Site Model for AFFF</p>	

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
			Contamination” from Defence. The covering letter and report notes that detectable levels of PFOS/PFOA are widespread in groundwater at the base. Off-site groundwater testing reported no detectable PFOS/PFOA. On-site and off-site surface water tests detected PFOS/PFOA.	
14	29/05/2013	Action by: EPA EPA letter to Defence advising EPA currently assessing the report and suggesting that Defence also send a copy of the report to NSW Health.		EPA briefs NSW Health re the issue on 31/05/2013 and subsequently updates NSW Health (11/09/2013)
15	12/06/2013	Action by: EPA EPA briefing note to the Minister for the Environment Robyn Parker providing information about Williamtown RAAF base PFOS contamination issue.		
16	05/2013	Action by: Hunter Water Hunter Water operates a number of bores in the Tomago sandbeds for maintenance reasons for a 1 month period. PFOS/PFOA testing undertaken for all operating bores with nil detects		

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
17	16/09/2013	Action by: EPA EPA briefs Interagency Planning Strategic Liaison Group meeting (EPA/WorkCover/NSW Health) on Williamtown PFOS/PFOA contamination issue.		
18	23/09/2013	Action by: EPA EPA provides information to NSW Office of Water regarding the groundwater contamination issue.		EPA notified Office of Water about the 'onsite' contamination issue identified by Department of Defence in May 2013. This advice noted that no groundwater contaminants has been detected off-site, no further action necessary at this time by Office of Water as contained on site.

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
19	25/09/2013	<p>Action by: EPA EPA letter to Defence regarding Stage 1 report:</p> <ul style="list-style-type: none"> • Concludes potentially unacceptable risk to human health and the environment from PFOS/PFOA levels at the site, but notes does not appear to be in off-site groundwater bores. • Concerns about surface water results above health guidelines raised and requests Defence convene a meeting with Government agencies to discuss findings as soon as practicable. • Stresses the importance of commencing the Stage 2 investigation works as soon as possible in the 2013-14 financial year as committed to by Defence in its letter of 17/05/2013. 		
	<p>EPA third request/advice to Defence:</p> <ul style="list-style-type: none"> - potentially unacceptable risk to human health on-site - surface water results discussions - need for timely Stage 2 investigation works 			
20	18/11/2013	<p>Action by: EPA EPA letter to Commonwealth Department of Environment:</p> <ul style="list-style-type: none"> • Formal notification of the site contamination issue at Williamtown for the Department to consider any actions it deems necessary. • Concern expressed that Defence had not responded to EPA letter of 25/9/2013. • Noted EPA does not have a regulatory role due to Defence being a Commonwealth Government agency. 		

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
21	05/12/2013		<p>Defence letter to OEH (EPA) advising that Stage 2 environmental investigations planned to commence in late 2013 had been delayed, with the project now planned to commence in early 2014.</p> <p>Defence letter to Office of Water advising of recent discovery of PFOS and PFOA during routine groundwater monitoring on-site at the RAAF base and the planned environmental studies.</p>	
2014				
22	15/04/2014	<p>Action by: EPA Email response to Defence consultant (URS) regarding biota sampling/testing protocols.</p>		<p>Response to query sent to NSW Environment Line from URS (Victoria) as consultant to Defence in relation to Williamtown. Query concerned protocols for permits/access and testing regimes.</p>

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
23	13/05/2014		Defence letter to EPA advising it had engaged environmental consultant to conduct Stage 2 investigation with intended scope of the investigation to be provided to EPA when planning is sufficiently advanced.	
24	08/2014	Action by: Hunter Water Due to falling water storage levels Hunter Water undertake risk assessment of potential for contamination by PFOS/PFOA of water supplied from the Tomago sandbeds. Based on the risk assessment Hunter Water places an embargo on the operation of Borestations 7 & 9 for water supply purposes.		
25	04/09/2014	Action by: EPA / Defence Meeting at EPA Sydney office to discuss results of investigations with consultants of Defence. Meeting to discuss further studies to evaluate off site impacts of PFOS and PFOA and Defence's proposed community consultation process.		
26	12/09/2014	Action by: Hunter Water Hunter Water write to NSW Health advising them of measures taken to manage potential for PFOS/PFOA contamination in the operation of the Tomago Borefield		
27	25/09/2014		Defence letter to EPA advising: <ul style="list-style-type: none"> • Progress of Stage 2 investigation, including installing off-base monitoring wells in the vicinity of the 	
		Defence first round of information to community		

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
			<p>RAAF base to obtain data on groundwater.</p> <ul style="list-style-type: none"> • Flyer about the monitoring activity had been distributed to residents in close proximity to the monitoring wells. • Copy of an information pack attached - to be used if the flyer results in enquiries – information pack contains a map showing off-site monitoring well locations and FAQs concerning PFOS/PFOA contamination and potential risks, as well as information on the Stage 2 investigation program. 	
28	26/09/2014		<p>Defence email to Office of Water advising they are to commence further investigation of contamination in groundwater and soils on and adjacent to RAAF</p>	<p>The investigation included offsite monitoring (PFOS/PFOA) wells, commencing the week of 27 October 2014. Attachments included in the email were a cover letter regarding the investigation and a copy of the RAAF Base Williamtown Stage 2 Flyer outlining the installation of monitoring wells (depth and location).</p>

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
			Base Williamtown as flagged in December 2013. Defence indicate that they would also be advising nearby residents via a flyer at this time and any enquires received by Office of Water should be directed back to Defence.	
29	21/10/2014		Defence letter to EPA providing a progress update on off-site investigation work and confirming residents in close proximity to the planned activities were provided with an information flyer and there were no enquiries received from residents who received the information pack.	
2015				
30	03/03/2015	Action by: NSW Health NSW Health email (cc EPA) to Defence expressing concern about silence on extent of contamination by Defence and requesting a meeting with NSW agencies.		
	<div style="border: 1px solid black; padding: 2px; display: inline-block;">NSW Health request for further information</div>			
31	12/03/2015		Defence email to NSW Health (cc EPA) advises <i>"the project has...been expanded to address</i>	

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		NSW Government	Department of Defence	
			<p><i>data gaps found during the initial investigation. We are currently in the process of installing our last set of off-site monitoring wells this coming week and expect to have a final set of results in April.....At this stage, we anticipate providing relevant stakeholders with a draft report in late May, after which we would be happy to hold a meeting to discuss the outcomes of the work completed.”</i></p>	
32	05/2015		<p>Defence email correspondence to EPA – attached Defence Contamination Directive #8.</p>	
33	07/15 – 09/15	<p>Action by: Hunter Water Hunter Water operate the Tomago borefield for water supply purposes with the exception of stations 7 & 9. Testing of the operating bores returns nil detects for PFOS/PFOA.</p>		

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
34	04/08/2015 <div style="border: 1px solid black; padding: 2px; width: fit-content;">Defence provision of draft Stage 2 report</div>		Defence letter (attached to email) to EPA attaching link to draft Stage 2 report (2000+pp, dated 3/8/2015) and requesting meeting with NSW agencies to brief them on the findings which indicates off-site groundwater contamination.	<p>What the draft Stage 2 report should have done, but did not do, was provide information on the extent of the contamination and likely pathways to human exposure.</p> <p>For example, information on the extent of the groundwater contamination plume and the role of surface water pathways in spreading the contamination and likely spread offsite should have been included in the draft Stage 2 report. Currently the boundary of the impacted groundwater and surface waters are both changing as new information comes to light. Much of this information could have been generated some time ago in the response to monitoring investigations undertaken by consultants.</p>
35	12/08/2015 <div style="border: 1px solid black; padding: 2px; width: fit-content;">Defence presentation of findings to NSW Govt agencies</div> <div style="border: 1px solid black; padding: 2px; width: fit-content;">EPA advice to Defence to liaise/consult with media on report findings</div>		Briefing on Stage 2 provided to NSW agencies and Port Stephens Council. EPA expressed concern at the information presented and the need to consult with NSW Health and NSW Office of Water. The EPA advised Defence that they should liaise and consult with local print and electronic media regarding the findings of the investigations.	
36	19/08/2015	Action by: EPA Notification to DPI Water of the preliminary findings of the Stage 2 investigations into both 'onsite' and 'offsite' contamination. Williamtown.		

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
37	20/08/2015	<p>Action by: EPA and other NSW agencies NSW Multi-agency meeting convened by EPA to discuss draft Stage 2 report review findings.</p>		Draft minutes prepared but not finalised – used instead to draft the EPA letter to Defence on 7/09/2015.
38	25/08/2015	<p>Action by: EPA; NSW Health; DPI (Water)</p> <p>EPA writes to DPI Water advising that use of US EPA standards is appropriate and that:</p> <p>“notifications be made to potentially impacted licence holders and land occupiers who might use these waters” and that “DPI Water consider further investigation of water quality in those licensed bores, along with notification to existing licence holders (and others who may hold unlicensed bores) regarding the issue.”</p> <p>NSW Health writes to DPI Water advising that:</p> <p>“...there is potential that contaminated water may be considered unsuitable for a range of uses, not only potable but also for other purposes such as vegetable watering, pasture irrigation, cropping and stock use.”</p> <p>Health also sought advice on “...what DPI Water has in place to identify and communicate with both licensed and unlicensed water users within the contaminated zone.”</p>		

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		NSW Government	Department of Defence	
39	26/08/2015	<p>Action by: DPI</p> <p>Email received by Health in relation to DPI Water's comments regarding communication with the potentially affected community.</p>		
40	27/08/2015	<p>Actions by: DPI, NSW Health, DPC</p> <p>DPI Water responds by email and advises the need for a coordinated communication and sampling strategy.</p> <p>Health concurred via email the EPA was to take the lead and not delay in further detailed risk and communication and mitigation with the community.</p> <p>DPI Water met with the Department of Premier & Cabinet in the Hunter.</p>		
41	02/09/2015 – 03/09/2015	<p>Action by: EPA</p> <p>EPA briefings to the Minister for the Environment Mark Speakman providing information about Williamstown RAAF base PFOS contamination issue.</p>		
42	02/09/2015	<p>Action by NSW Health; Hunter New England Local Health District (HNELHD); EPA</p> <p>NSW Health and NSW Agencies teleconference to consider NSW agency responses to and advise on draft Stage 2 Report</p>		
From 03/09/2015		<p>From this date, actions by the EPA and other NSW government agencies have been frequent, including communications with Defence and the following entries detail significant actions or milestones only.</p>		

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Date / Key event	ACTIONS		CONTEXT
	NSW Government	Department of Defence	
43 03/09/2015 <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> NSW Govt determination on potential health risks and introduction of restrictions </div> <div style="border: 1px solid black; padding: 2px;"> NSW Govt media release advising of introduction of restrictions </div>	Action by: EPA on behalf of NSW Government <ul style="list-style-type: none"> • The NSW Government convened a multi-agency meeting (chaired by NSW Health), including Defence to discuss the NSW Government's preliminary response to the draft Stage 2 report. • Determination on potential health risks and introduction of restrictions, including the fishing closure • The EPA issued a media release on behalf of NSW agencies announcing fisheries closures and restrictions on bore water use. 		<p>Efforts by the NSW Government to agree a joint media release with Defence were unsuccessful. Defence considered that the precautionary restrictions agreed by the NSW Government to be premature.</p> <p>Relevant NSW Government involved in responding to the contamination include:</p> <ul style="list-style-type: none"> • EPA • NSW Health • HNELHD • Department of Primary Industry (DPI) Fisheries • DPI Biosecurity and Food Safety • DPI Water • DPI Agriculture • Department of Premier and Cabinet • Hunter Water
44 03/09/2015		Defence media release issued noting EPA's media release.	
45 04/09/2015 <div style="border: 1px solid black; padding: 2px;"> NSW Govt first direct engagement with local community </div>	Action by: EPA on behalf of NSW Government; DPI EPA conducts letterbox drop to Williamtown affected properties regarding contamination issue. DPI Water directly contacts and advises the (7) licensed groundwater users of the contamination notification.		

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	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
46	07/09/2015 NSW Govt formal response to Defence on draft report – requirements of Defence set out	Action by: EPA on behalf of NSW Government EPA letter to Defence on behalf of NSW agencies expressing considerable concern about the report’s findings, including a number of information gaps about the extent of the contamination and potential risks to human and ecosystem health. EPA requests Defence to undertake a range of actions including developing a communication strategy and holding a local community consultation meeting by 18/9/2015. Defence also directed to provide a detailed action plan by 04/10/2015.		<ul style="list-style-type: none"> • The local community consultation meeting took place on 16 September 2015 (Item 39). • A formal response to this letter was provided on 4 November 2015 (Item X) • A Sampling Analysis and Quality Plan (SAQP) was provided on 10 November 2015
47	09/09/2015	Action by: DPI DPI Water undertakes water quality sampling of DPI Water monitoring bore at Williamtown.		
48	10/09/2015 NSW Govt request to Defence to finalise Stage 2 report and make it publically available	Action by: EPA on behalf of NSW Government EPA letter to Defence advising NSW agencies will continue to review existing and new information as it becomes available, with existing material collected referred to Expert Panel for consideration. Defence encouraged to finalise Stage 2 report and make it publically available on Defence website.		

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		NSW Government	Department of Defence	
49	11/09/2015	<p>Action by: EPA on behalf of NSW Government</p> <p>NSW Multi-agency meeting (NSW EPA, NSW Health, DPI (Fisheries, Biosecurity, Water), Hunter Water Corporation, Food Authority) with Defence</p> <ul style="list-style-type: none"> • NSW Agencies and Defence agreed on weekly updates • EPA to coordinate NSW attendance at the Defence 'Community Information Session' on 16/9/2015 		<p>The multi-agency meetings with Defence commenced on a weekly basis throughout September and the final meeting was held on 14 October 2015. An email from EPA for a date for the next meeting on 27 October 2015 was met by an email from Defence on 10 November 2015 in which it was indicated that Williamtown contamination business was adequately addressed through the CRG and the multi-agency meetings had limited utility.</p>
50	14/09/2015	<p>Action by: EPA on behalf of NSW Government</p> <p>Terms of Reference for Expert Panel finalised with the Office of the Chief Scientist and Engineer. Draft sent to NSW agencies to inform and request nomination of Director level representatives.</p> <p>Handover from DPC to EPA to coordinate whole-of-government response:</p> <ul style="list-style-type: none"> • Coordination of NSW representation for the Defence 'Community Information Session' continues. • EPA and DPI-Water coordinating DPI-licensed groundwater bore sampling in the affected area • Request to NSW Food Authority, Fisheries and Health to present a timeline for short term response • DPI organising meeting with commercial fishers and oyster growers. 		

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		NSW Government	Department of Defence	
51	15/09/2015	<p>Action by: EPA on behalf of NSW Government Presentations and Final running sheet for community information session delivered to Defence.</p>		
52	16/09/2015	<p>Action by: Defence, EPA, Hunter Water, DPI Fisheries, DPI Biosecurity, NSW Food Authority, NSW Health Community meeting at Stockton RSL:</p> <ul style="list-style-type: none"> • DPC meeting with commercial fishers and oyster growers. • Elected officials meeting (Defence coordinated) • Community Information Session – Defence coordinated, NSW Agencies presented <p>(Presentations available online)</p>		

<p>First community meeting held</p>
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		NSW Government	Department of Defence	
53	16/09/2015 <div style="border: 1px solid black; padding: 5px; width: fit-content;"> Expert Panel established to advise on Williamtown contamination </div>	Action by: the Minister for the Environment Mark Speakman Media release advising of the establishment of the Expert Panel to advise the EPA (as lead agency for the response to the Williamtown contamination) and a review of past management of the Williamtown contamination issue.		<p>The Expert Panel is led by NSW Chief Scientist & Engineer Professor Mary O’Kane and consists of a range of technical experts in contamination and health. It also includes senior representatives from the EPA, the Department of Health, the Department of Primary Industries and the Hunter Water Corporation.</p> <p>The Expert Panel explores the nature and extent of contamination from fire-fighting foams used historically at Williamtown RAAF base and recommend next steps.</p> <p>The Panel provides scientific advice to the EPA and other NSW Government agencies to inform decisions that may need to be made to protect the community and the environment.</p> <p>The Expert Panel works in partnership and consult regularly with the Williamtown Community Reference Group (CRG) (see Item 42) to ensure the community remains informed and updated and can continue to raise any concerns.</p>
54	22/09/2015	Action by: DPI Water undertakes water quality sampling of DPI Water monitoring bore at Williamtown.		

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		NSW Government	Department of Defence	
55	23/09/2015 <div style="border: 1px solid black; padding: 2px; width: fit-content;">First Expert Panel meeting held</div>	Actions by: Expert Panel; DPI; EPA <ul style="list-style-type: none"> Expert panel meeting #1 Panel commenced putting in place mechanisms to gather community feedback Panel identified compensation by Defence as critical issue. <ul style="list-style-type: none"> EPA secretariat for Expert Panel DPI commence deputation trial EPA commences ground / bore water trial 		Expert Panel minutes available at: https://www.epa.nsw.gov.au/mediainformation/expert-panel-williamtown.htm
56	29/09/2015	Action by: EPA on behalf of NSW Government <ul style="list-style-type: none"> Letter to Defence – Assessment and responsibility for payment for financial impacts associated with the Williamtown contamination EPA has deployed a sampling team on the 29 September 2015 to obtain surface water samples 		This letter sets out the position of the NSW Government that the ‘polluter pays’. Various heads of liability on the part of Defence as the polluter are detailed.
57	30/09/2015	Actions by: Expert Panel; EPA <ul style="list-style-type: none"> Expert panel meeting #2 It was agreed by the Panel that the oysters from the Tilligerry Creek Harvest Area do not present a food safety risk. <ul style="list-style-type: none"> EPA commences surface water sampling and another round of ground / bore water sampling 		
58	01/10/2015 <div style="border: 1px solid black; padding: 2px; width: fit-content;">First Community Reference Group</div>	Actions by: DPC; Community Reference Group (CRG) DPC Chair and secretariat for Williamtown CRG CRG Meeting #1		The NSW Government established the Williamtown Contamination Investigation Community Reference Group (CRG) to enable the community to engage directly with government agencies and experts about the Williamtown RAAF Base contamination. The CRG provides a voice for the community to raise concerns; a further means to communicate new information to residents and consumers; and

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		NSW Government	Department of Defence	
	meeting held			<p>facilitate ongoing communication between the government and local community.</p> <p>The CRG works in partnership with the NSW Government-appointed Expert Panel to coordinate and respond to community feedback.</p> <p>NSW Parliamentary Secretary for the Hunter and Central Coast, Scot MacDonald, is tasked with coordinating information flow to elected representatives at all levels of Government, including advising the NSW Premier and the NSW Minister for the Environment about how the community wishes to be kept informed of progress.</p> <p>The members of the CRG represent a broad range of local community organisations, industry, Aboriginal Land Council, as well as NSW government agencies, Port Stephens Council and Defence.</p> <p>CRG minutes available at: https://www.epa.nsw.gov.au/mediainformation/community-reference-williamtown.htm</p>
59	02/10/2015	<p>Actions by: Expert Panel Expert Panel meeting #3</p> <ul style="list-style-type: none"> • Decision taken to create Water Working Group. • NSW Health to upload advice explaining that blood test have no practical value in determining health outcomes 		

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60	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
	7/10/2015	<p>Actions by: EPA on behalf of the Expert Panel EPA request to Defence for access to the Base to perform an onsite site inspection and for copy of Construction & Environment Management plan</p>		The Construction & Environment Management Plan pertains to infrastructure works being undertaken on the RAAF base. The EPA and Expert Panel have concerns that these works may further mobilise PFOS/PFOA contaminants
61	08/10/2015	<p>Actions by: Expert Panel; CRG; ; ERG EPA on behalf of the NSW Government;</p> <ul style="list-style-type: none"> • All meetings held at Williamtown • Minister for the Environment Mark Speakman attended • Expert Panel meeting #4. <p>A sampling strategy was provided by AECOM on behalf of Defence</p> <p>The Panel endorsed the decision to extend the investigation boundary based on the results of the surface water sampling results. The map of the investigation area was updated and a draft announcement of this extension made.</p> <p>Decision taken to create a Risk Assessment Working Group</p> <ul style="list-style-type: none"> • Expert Panel Water Working Group (WWG) meeting #1. Extended investigation area recommended and subsequently announced by EPA upon the advice of the Expert Panel, and on behalf of the NSW Government. • CRG meeting #2 • ERG meeting #1; • DPC Secretariat for ERG • Follow up email from EPA to Defence on onsite inspection 		<p>The Expert Panel Water Working Group (WWG) has been established to assist in developing the NSW Government's response to the Department of Defence in relation to investigations to characterise and manage its offsite PFC contamination resulting from historical usage of PFC containing firefighting foams at the Williamtown RAAF Base.</p> <p>Chaired by independent Expert Panel member, Dr Will Glamore, the WWG will provide advice on what additional sampling needs to be undertaken by Department of Defence and/or State Government agencies to inform the development of the comprehensive Human Health Risk Assessment (HHRA). This includes the development of hydrological and hydrogeological modelling to improve the understanding of potential migration pathways for PFCs in the environment and help to identify potential human health and environmental receptors.</p> <p>The Elected Representatives Group (ERG) was established to communicate to members the outcomes from the CRG; information from State Government Agencies and the Expert Panel; and assist with information flow between Federal and State MPs and Mayors.</p>

First Water Working Group meeting

First Elected Representatives Group meeting

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
62	13/10/2015 <div style="border: 1px solid black; padding: 2px; display: inline-block;">First Risk Assessment Working Group meeting</div>	Actions by: Expert Panel; EPA Expert Panel Risk Assessment Working Group (RAWG) meeting #1		<p>The Risk Assessment Working Group (RAWG) has been established to provide expert advice to the Chair of the Expert relating to the potential risk pathways associated with the off-site migration of PFOS and PFOA. The RAWG will also provide ongoing advice to the Department of Defence while they undertake the Human Health Risk Assessment. This includes advice on biota sampling and community land use information that needs to be undertaken and assistance in determining immediate exposure pathways to land and water users in the vicinity of RAAF Williamtown.</p> <p>The RAWG is co-chaired by Expert Panel members Prof Wayne Smith, NSW Health Director of Environmental Health, and Craig Lamberton, EPA Director of Hazardous Incidents and Environmental Health.</p>
63	14/10/2015	Actions by: Expert Panel; EPA Expert panel meeting #5. Defence attended for part of the meeting. Defence asked: <ul style="list-style-type: none"> • to arrange for access to the Base to perform an onsite site inspection, and • for copy of Construction & Environment Management plan 		
64	14/10/2015	Action by: the Minister for the Environment Mark Speakman Letter to the Assistant Minister for Defence, Darren Chester MP, urging financial assistance for members of the community financial impacted as a result of the contamination		

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
65	15/10/2015	Actions by: DPC; CRG CRG meeting #3		
66	16/10/2015	Actions by: DPC; CRG, EPA, NSW Health Community Drop in event #1 - Salt Ash Public School	Defence attendance at drop-in event.	The drop in events are organised by DPC/EPA/CRG and are attended by representatives and experts from DPC, EPA, NSW Health (including mental health experts), DPI, Hunter Water. Officials from Defence, other agencies, and non-governmental organisations have also been in attendance at one or more of these events including Port Stephens Council, Small Business Commission, Centrelink, Red Cross, and the Salvation Army.
67	21/10/2015	Actions by: Expert Panel; EPA Expert panel meeting #6 The Panel's decision was that the Working Groups rather than the Expert Panel were the appropriate forum to interact with Defence and their technical experts.		
68	22/10/2015	Actions by: Expert Panel; EPA <ul style="list-style-type: none"> • Expert panel meeting #7 The Panel decided to defer the decision surrounding the expiry of the temporary prohibition of commercial and recreational fishing and take further advice on the matter <ul style="list-style-type: none"> • RAWG meeting #2 • WWG meeting #2 • CRG meeting #4 		
69	23/10/2015	Action by: DPI; ERG; DPC <ul style="list-style-type: none"> • DPI Water directly contacts and advises (4) additional licence holders captured within the extended investigation area of the contamination notification. • ERG meeting #2 		

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
70	26/10/2015	<p>Actions by: Expert Panel; EPA Expert panel meeting #8 The Panel's decision was to advise the NSW EPA & DPI that the local fishing closure should be extended by eight months while a comprehensive Human Health Risk Assessment is completed.</p>		
71	27/10/2015	<p>Actions by: EPA; Expert Panel;</p> <ul style="list-style-type: none"> • RAWG meeting #3 – Defence attended with technical advisers • RAWG advised Defence that sampling plan contains significant flaws. • Access to base to perform an onsite inspection again requested. • DPI announce extension of fisheries closure in Fullerton Cove and Tilligerry Creek 		
	<p>Extension of fisheries closure / restrictions</p>			
72	28/10/2015	<p>Actions by: Expert Panel; EPA</p> <ul style="list-style-type: none"> • WWG meeting #3 • EPA Teleconference with Defence: access to the Base to perform an onsite site inspection again requested 		
73	29/10/2015	<p>Actions by DPC; CRG CRG meeting #5</p>		
74	04/11/2015	<p>Actions by: Expert Panel; EPA; DPI</p> <ul style="list-style-type: none"> • Expert panel meeting #9 The Panel endorsed for release the Preliminary Dietary Exposure Assessment – Seafood – Tilligerry Creek and Fullerton Cove, Williamtown NSW Report 	<ul style="list-style-type: none"> • Defence letter to EPA responding to EPA letter 07/09/2015 (Item 32) discussing extent of contamination, Human Health and Ecological Risk 	

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
		<p>The Panel formed a subcommittee to discuss what research papers should be commissioned to inform the future work of the Panel.</p> <ul style="list-style-type: none"> • WWG meeting #4 – Defence in attendance Defence asked to arrange for access to the Base to perform an onsite site inspection and for copy of Construction & Environment Management plan. Defence advised sampling strategy inadequate. <p>DPI commences prawn sampling in Hunter River and Fullerton Cove</p>	<p>Assessment, limiting further environmental pollution, communication strategy, data sharing and other uses of AFFF in the Williamstown area.</p>	
75	5/11/2015	<p>Action by: DPC, EPA and CRG Community Drop in event #2 - Fern Bay Hall NSW Agencies and Expert panel members attended</p>	<p>Defence in attendance at drop-in event</p>	<p>The drop in events are organised by DPC/EPA/CRG and are attended by representatives and experts from DPC, EPA, NSW Health (including mental health experts), DPI, and Hunter Water. Officials from Defence, other agencies, and non-governmental organisations have also been in attendance at one or more of these events including Port Stephens Council, Small Business Commission, Centrelink, Red Cross, and the Salvation Army.</p>
76	09/11/2015	<p>Action by: DPC, ERG ERG Meeting #3</p>		
77	10/11/2015		<p>Defence provides to EPA the Sampling and Analysis Quality Plan (SAQP)</p>	
78	12/11/2015	<p>Action by: DPC, EPA, Expert Panel and CRG</p> <ul style="list-style-type: none"> • RAWG meeting #3 • CRG meeting #6 		

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
79	13/11/2015	<p>Action by: Expert Panel and EPA</p> <ul style="list-style-type: none"> Expert panel meeting #10 <p>The Panel noted that Defence had not been able to bring its experts to a meeting of the subcommittee yet.</p> <p>It was noted that NSW Health will be hosting an enHealth forum on the 11 December 2015 to discuss developments in the assessment of PFOS & PFOA and to look at establishing a national process for identifying human health issues relating to them. The Working Group will make its recommendations on appropriate health standards including tolerable daily intakes (TDIs) to the Panel following the enHealth meeting.</p>		
80	17/11/2015	<p>Action by: EPA on behalf of the Expert Panel</p> <p>EPA communication regarding bore sampling results commenced to residents</p>		
81	18/11/2015	<p>Action by: Expert Panel and EPA</p> <ul style="list-style-type: none"> RAWG meeting #4. Defence attended (no technical advisors attended). Access to the Base to perform an onsite site inspection requested. Defence advised that SAQP flawed and asked to advise their technical advisors. WWG meeting #5 		

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
82	19/11/2015	<p>Action by: DPC, EPA and CRG Community Drop in event #3 - Salt Ash School Community Drop in NSW Agencies and Expert Panel members attended (NSW Chief Scientist and Engineer, Professor Mary O’Kane, Chair; and Dr Alison Jones (toxicologist), penal member)</p>	Defence attendance at drop in event	The drop in events are organised by DPC/EPA/CRG and are attended by representatives and experts from DPC, EPA, NSW Health (including mental health experts), DPI, and Hunter Water. Officials from Defence, other agencies, and non-governmental organisations have also been in attendance at one or more of these events including Port Stephens Council, Small Business Commission, Centrelink, Red Cross, and the Salvation Army.
83	25/11/2015	<p>Action by: Expert Panel and EPA</p> <ul style="list-style-type: none"> Expert panel meeting #11 <p>The Panel noted the full Human Health Risk Assessment Scoping and Advice document would be provided to the CRG at its next meeting.</p> <ul style="list-style-type: none"> WWG meeting #6 		
84	26/11/2016	<p>Action by: DPC, CRG, Expert Panel CRG meeting #7.</p>		
85	27/11/2015	<p>Action by: EPA, Expert Panel RAWG meeting #5. Defence attended with technical advisors:</p> <ul style="list-style-type: none"> Access to the Base to perform an onsite site inspection requested. Defence advised that SAQP flawed. Ensuing discussion saw greater agreement from Defence technical advisors with EPA / EP position. 		
86	30/11/2015		<p>Action by: Defence EPA receives brief telephone call invitation from Defence Army Infrastructure to attend the base on 11 December 2015. No written follow up or other details were received.</p>	

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
87	01/12/2015	<p>Action by: DPC, CRG, NSW Premier Special meeting held between Community members of the CRG and NSW Premier. Chaired by Parliamentary Secretary for the Hunter.</p>		
88	02/12/2015	<p>Action by: EPA on behalf of Expert Panel</p> <ul style="list-style-type: none"> EPA letter to Defence restating to Defence that their sampling plans were inadequate and based on the incorrect guidelines (should be enHealth 2012), that 6 previous requests to access the base and that 5 previous requests for the CEMP had gone unanswered, noting that 4 water sampling reports had been received and requesting that any other sampling or related data is made available. Expert panel meeting #12 		
89	03/12/2015	<p>Action by: Professor Mary O’Kane The Chair of the Expert Panel gave evidence at the Senate Foreign Affairs, Defence and Trade into Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia</p>		
90	04/12/2015	<p>Action by: EPA on behalf of Expert Panel EPA letter to Defence stating that the suggested date of 11 December 2015 was inconvenient as it clashed with the enHealth Summit on PFCs. An alternate date was sought with a preference for 17 December 2015 in line with previous discussions.</p>		

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
91	09/12/2015	Action by: Expert Panel and EPA Expert panel meeting #13 WWG meeting #5		
92	10/12/2015	Action by: DPC, CRG, NSW Premier; EPA on behalf of Expert Panel <ul style="list-style-type: none"> • CRG meeting #8. ERG meeting #4 • Invitation from Defence to inspect the base on 17 December 2015 accepted. 	Action by: Defence <ul style="list-style-type: none"> • First written invitation received by the EPA from Defence on 17 December 2015 to inspect the base. • Defence provided an overview of the four major base development projects being undertaken at RAAF Williamtown to the CRG members 	

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
93	11/12/2015	Action by: enHealth, NSW Health, EPA, Defence and other State, Territory and Federal government agencies EnHealth summit on aimed at developing national approaches to Attendance at EnHealth National PFC (Perfluorinated Chemicals) – objective of developing a Total Dietary Intake (TDI)		<p>The National PFC (Perfluorinated Chemicals) Summit coordinated by the Environmental Health Standing Committee (enHealth) of the Australian Health Protection Principal Committee was attended by State and National Health and Environmental Agencies, Defence and independent experts in toxicology.</p> <p>The intended outcome was to provide some National guidance Statements on Blood tests, Breast feeding, Pregnancy and Factsheets. Some draft text for the National guidance Statements was collectively created with much discussion. This draft text will be taken to another enHealth committee meeting in December 2015 and further to the Australian Health Protection Principal Committee in the near future.</p> <p>No National Tolerable Daily Intake criteria was established and will likely take until mid 2016 for this to occur.</p>
94	16/12/2015	Action by: Expert Panel; EPA; DPC; CRG <ul style="list-style-type: none"> • Expert panel meeting #14 • RAWG meeting #6 • Action by: DPC, EPA and CRG • Community Drop in event #4 - • Salt Ash School Community Drop in NSW Agencies and Expert Panel members to attend 	Defence attendance at drop-in events	<p>The drop in events are organised by DPC/EPA/CRG and are attended by representatives and experts from DPC, EPA, NSW Health (including mental health experts), DPI, and Hunter Water. Officials from Defence, other agencies, and non-governmental organisations have also been in attendance at one or more of these events including Port Stephens Council, Small Business Commission, Centrelink, Red Cross, and the Salvation Army.</p>

WILLIAMTOWN CONTAMINATION CHRONOLOGY

	Date / Key event	ACTIONS		CONTEXT
		NSW Government	Department of Defence	
95	17/12/2015	<p>Action by: Expert Panel; WWG; EPA; Defence and construction contractors, Lend Lease</p> <ul style="list-style-type: none"> Defence permitted NSW Government officials to inspect the RAAF Base for the purpose of making site specific observations at the Williamtown RAAF Base. <p>The site inspection provided a primary focus on new construction works and future developments.</p> <p>Defence still has limited information on the source areas including any potential strategies to intervene.</p>		
96	22/12/2015	<p>Actions by: EPA, DPI, DPC, Hunter Water, Defence</p> <p>Evidence given to the second hearing of the Senate Foreign Affairs, Defence and Trade into Contamination of Australia's Defence Force facilities and other Commonwealth, state and territory sites in Australia, held at Newcastle</p>		
97	23/12/2015	<p>Action by NSW Premier:</p> <p>Announcement of a package of measures by the NSW Government to assist the Williamtown community</p> <ul style="list-style-type: none"> Connect affected developed properties within the investigation area to town water Invest in new contamination testing equipment Employ additional community liaison staff to help address concerns of the local community 		