Committee Secretary

Joint Standing Committee on Foreign Affairs Defence and Trade

P.O.Box 6021

Parliament House

Canberra. Act 2600

Regarding Oakey Senate Inquiry August 17th 2018

I would like to reply to the information that was given by Defence at The Joint Standing Committee on Foreign Affairs, Defence and Trade on Friday 17<sup>th</sup> August 2018 by Mr Gressorial.

This is the timeline which is very different to what was said to Senator Moore by Mr Grzeskowiak for people at Oakey.

9/9/2011 Coffrey Environments publish reports titled 'Stage 2 (Part 2) Environmental Investigation – Army Aviation Centre Oakey/' The report identifies hydrocarbon impact in shallow groundwater and in locations surrounding the down gradient of underground waste collection or fuel storage facilities. This impact was said to represent a "significant release" of hydrocarbon products and includes a separate phase hydrocarbon plume which was present in five investigation points up to 2.8 in thickness. They found that the wells located up to 100m hydraulically down gradient (in Area C2) contain concentrations of hydrocarbons which could potentially impact human health and the environment." Report asked for further systematic sampling to be done particularly in regards to PFOS/PFOA to determine the potential for offsite migration of the chemicals.

1/1/2012 The Cth "commenced an investigation into the nature and extent of the PFAS on and around Army Aviation Centre Oakey in 2012"

30/11/2012 Since 30<sup>th</sup> November 2012 the Oakey Water Treatment Plant ceased operation and no water has been drawn from the Oakey Creek Alluvial Aquifer.

1/1/2013 Up until 2013 the Commonwealth used bores for recreational purposes (swimming pools), fire-fighting and fire training purposes, an extensive irrigation network to various gardens, sporting fields and helicopter landing strips throughout the Oakey Base (sporting ovals and fields, airfield dust suppression, workshop and aircraft wash-down, sundry industrial uses).

1/1/2013 Use of groundwater on the Oakey Base ceased for all purposes in January 2013

1/12013 The Cth began "targeted off-site sampling" for the contamination

1/2/2013 Parson Brinckerhoff published a report in February 2013 titled "Stage 3 Risk Assessment and Remediation Design – Groundwater Monitoring Event – Army Aviation Centre Oakey" the authors recommend continued periodic groundwater monitoring at least once a year with the inclusion of hydrocarbons analyses; delineation of PFCs; identification of any leaks; sampling of irrigation bores on leased Defence property; human health risk assessments for the users of the pool and irrigation bores; notification to appropriate government authority where PFC impacts are occurring; upon confirmation of PFOS detections notification to the TOOWOOMBA REGIONAL COUNCIL and label all unsecured irrigation taps on AACO as not for human consumption.

In March 2013, Defence receives the "Stage 1 – Conceptual Site Model AFF Contamination prepared by GHD." The Stage 1 reports findings regarding the contamination on RAAF Base Williamtown include: Detectable PFOS and PFOA concentrations in groundwater are widespread on the RAAF Base Williamtown. The highest concentration associated with the fire training pad, trade waste facilities, Lake Cochran. and the former landfill. The report identified a number of existing and potential future gunman receptors of contamination soil and groundwater offsite.

1/5/2013 Parson Brinckerhoff published in May 2013 an "Addendum to Stage 3 Risk Assessment a Remediation Design – Groundwater Monitoring Event – Army Aviation Centre Oakey" which further assessed the extent of the PFC impacts in the lower alluvial aquifer system. In December 2012 monitoring event the extent of this was not defined to the West and Southwest area. In addition to the December findings the authors recommended registered bore35983 well cap be replaced and re-tested; ongoing sampling of the agricultural irrigation bores occur; identify potential risk pathways; complete delineation of PFCs; quarterly monitoring; the TOOWOOMBA REGIONAL COUNCIL be notified of the contamination of PFOS; consider discussions about PFC extending offsite.

1/5/2013 Parsons Brinckerhoff published their report on 'Offsite Risk Assessments PFOS and PFOA in Groundwater – Army Aviation Centre Oakey.' The objective was to assess the potential for unacceptable risk to human health following incidental ingestion of groundwater impacted by PFOS and PFOA. The HHRA estimated that the HI were below the tolerable threshold which indicated that adverse health effects from exposure to PFOS and PFOA in groundwater offsite, for offsite populations and exposure pathways of concern are unlikely. The ERA Screening identified a potential risk to aquatic organism and birds in the event PFOS impacts the groundwater in the south/west of the site. The potential for adviser impact is unable to be excluded on the basis of the existing information. Based on these screenings the Parsons Brinckerhoff recommends higher level (Level 2) ERA is undertaken.

1/6/2013 Parsons Brinckerhoff published 'Stage 3 Risk Assessment and Remediation Design Remediation Action Plan – Perfluorocarbons in Groundwater' They recommend a complete delineation of PFCs impacted groundwater to the west and southwest of the site. Completions of assessment activities will allow examination of other potential receptors to determine if further remediation is required.

1/6/2013 Parsons Brinckerhoff publish" Stage 3 Risk Assessment and Remediation Design Remediation Action Plan – Petrol Hydrocarbons.' It suggests the most cost effective means to remediate hydrocarbons in the source was to be UST and interceptor trap removal, shallow soil excavation followed by natural source-zone depletion for areas which cannot be readily accessed. They consider these activities to be practical given the remediation goals.

4/9/2013 NICNAS published a Factsheet which indicated that PFOS- based firefighting foam not to be used for fire training purposes to limit environmental release.

10/12/2013 Second private meeting with Oakey landholders re PFAS contamination on BASE(December) 'new asbestos" comment

10/7/14 Mr Mark O'Connell, Base Support Manager Darling Downs, Defence Support Organisation, wrote to the Toowoomba Regional Council advising of test results stating "As a precaution Defence recommends not drinking water from any underground sources within the investigation area until further notice.

20/7/2014 Defence released a flyer on the groundwater investigation. (Which not everyone in the area received) the flyer stated that the DoD had undertaken an environmental investigation and identified that groundwater beneath the Oakey Base may have been impacted by the historical use of firefighting foams in training activities between 1970 – 2005. The foams contained PFOS The DoD had commenced targeted water sampling to the west and southwest of Oakey Base as part of a long-term investigation into potential human health risks to water users. PFOS and PFOA were 'emerging contaminants' and limited research has been done into the possible health impact. The DoD recommended that landholders within the investigation area not drink the water from underground bores on their property. They announced that a community information session was to be held on 29<sup>th</sup> July 2014.

29/7/2014 Community Information Session- Groundwater Investigation.

1/8/2014 Army Aviation Centre Oakey- Groundwater Investigation- Water Use Survey

1/8/2014 Defence released factsheet on Groundwater Investigation Update – August 2014

1/11/2014 Defence releases factsheet on Groundwater Investigation Update- November 2014

2/12/2014 Community Information Session- Groundwater Investigation.

Kink Regards

Dianne Priddle

