

## Veterans' Legislation Reform – Exposure Draft Consultation

Serving Australian Defence Force (ADF) Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986 are not being afforded appropriate and or adequate recognition under the new “Veterans’ Entitlements, Treatment and Support (Simplification and Harmonisation) Bill 2024 No. , 2024”

There is minimal recognition for ADF Point Cook Fireftrs that were exposed to possibly the worst contaminated Australian Defence Force (ADF) site in ADF history, other than nuclear test sites. Other serving personnel are Vested by Instrument for overseas service by the Minister, to recognise Hazardous service. Point Cook fire ground has not been recognised by the Minister as a hazardous service area.

British nuclear testing commemorates and provides support for anyone who was exposed in the nuclear facilities during nuclear testing. Importantly the British nuclear testing tests were also carried out on Australian soil.

Yet ADF Fireftrs Point Cook 1 January 1957 and 31 December 1986 have not been awarded comparable recognition of hazardous service or British nuclear service, after being exposed to more than 132 chemicals on Australian soil facing a silent enemy, being of un-known chemicals and their combined mixtures.

Recognition from the government through the Firefighter scheme for, known and un-known chemicals provide;  
**Supporting Australian Defence Force Fireftrs**

*“This initiative provides support for Australian Defence Force (ADF) Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986 in recognition of the potential health effects **of being exposed** to a wide range of hazardous substances.”*

*“The Government recognises the risks faced by ADF Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986. This group **has been directly exposed** to a wide range of hazardous (**and at times unknown**) substances during fire suppression training, at a time when personal protective equipment was not of the same standard available today.”*

ADF Fireftrs who served at Point Cook were not decontaminated after chemical handling or after completing hazardous chemical work at or from the site where they were exposed to more than 132 now known chemicals. Chemical reactions due to heat and cooling causing atoms to become more un- stable transferred and shared electrons with other atoms which cause acute health effects. Forward looking, the Budget 2021-22 Portfolio Budget Statements 2021-22 Budget Related paper No. 1.3B provides a presumptive liability arrangement under DVA for a list of specified conditions only.

There has been no scientific evidence provided by the government to determine the breathing rates of Fireftrs during and while conducting chemical activities and their exposures at Point Cook fire ground. “Predicting the physical and chemical properties of matter in its various states from first principles is the grand challenge of quantum chemistry.” [1] Including chemical bond changes and their effects on ADF Point Cook Fireftrs, by DVA or Defence.

ADF Fireftrs of Point Cook Australia 1 January 1957 and 31 December 1986 were exposed to chemicals, where bond enthalpies, “During chemical reactions, the bonds between atoms may break, reform or both to either absorb or release energy. The result is a change to the potential energy of the system. The heat absorbed or released from a system under constant pressure is known as *enthalpy*, and the change in enthalpy that results from a chemical reaction is the *enthalpy of reaction*.” [2. para, 2]

ADF Fireftrs Involvement at the Point Cook Fire grounds was extreme and all-inclusive in chemical handling, usage and participation with no personal protective equipment or face masks. Chemicals and their

by-products were not removed from Fireftrs clothing and physical body, by decontamination processes. ADF Fireftr personnel were transferred by vehicles to their accommodation where contaminated work place

exposures of chemicals, from uniforms and personal body were cleaned, (not to today’s standards) in living quarter showers. Leading to cross contamination of chemicals into everyday clothing when using washing machines, and dryers.

Substituting the chemical atoms and their formulae for the nuclear testing nuclei, information and exposures would provide, it seems an Equal exposure situation, (where the contamination to personnel is split by radiation exposure yet chemical exposure is just as significant. When addressed together both are extremely hazardous.) “Reaction Enthalpy, of a chemical reaction is the enthalpy change that occurs when substances are transformed by a chemical reaction.” [3] Chemical mixture reactions and safe chemical handling Information including protective clothing and face masks were not available, issued or worn by Firefrs at Point Cook Fire ground.

The unpreparedness for handling chemicals and being exposed to chemicals was also inherent at Point Cook fire grounds, protective measures were not in place to safe guard, or decontaminate ADF Firefr personnel.

Information from the (ADF) Point Cook Firefr cohort (1956 – 1986) in relation to contamination of the chemicals from, in their respiratory tracts or determining the rates of take up to their lungs, or the relationship to Internal exposure are **Not** available.

Under the Veterans’ Entitlements, Treatment and Support (Simplification and Harmonisation) Bill 2004 No. 2004 the facility exists at 6B British nuclear test defence service for persons who rendered “British nuclear test defence service”

Commemorating British Nuclear Testing personnel, and all persons who were exposed to radiation, the Australian government has and will provide support for “Anyone who was in a nuclear test area at a relevant time is eligible, **regardless of whether their presence in a nuclear test area was associated with the nuclear tests.** This includes pastoralists and Indigenous people among others.” [4]

The Importance of the excerpts from the “Australian participants in British nuclear tests in Australia Vol 1: Dosimetry dated May 2026 provides under; “Australian Government The Repatriation Commission (Repat) dated 2 June 2006.” “On 16 July 1999, the former Minister for Veterans’ Affairs, the Hon Bruce Scott MP, announced that a cancer and mortality study of Australian nuclear test participants in British tests in Australia would be conducted. The aim of the study was to examine whether there is an increased rate of death and cancer among male nuclear test participants compared to the general Australian community.” [5. Repat para, 2]

Importantly under Main Findings, “The increases in cancer rates do not appear to have been caused by exposure to radiation. No relationship could be found between overall cancer incidence or mortality and exposure to radiation.” [6. pg. vi para 1]

## 1 Introduction

### 1.1 Objective

“There is currently limited information regarding each participant’s tasks and activities, time of service at a test site, and specific ionising radiation doses. This lack of information has made it difficult to accurately categorise ionising radiation exposure levels for each individual involved in the tests. Therefore, the categorisation of individuals into different exposure levels is based upon the activities of their work group, and the ionising radiation doses that may have been recorded for other individuals within that group.” [6. Pg 1 para 2]

Particular attention was highlighted towards RAAF personnel at; “Royal Australian Air Force (RAAF)” “The most notable exception to the overall control of radiation exposures was the exposure of RAAF personnel, aircrew and ground staff, to both an external and an internal hazard, during sampling of the

radioactive cloud using unpressurised aircraft, and subsequent decontamination of the aircraft. **No radiation protection procedures were put in place,**” These events have been commented on in both the Symonds’

History (Symonds 1985) and Royal Commission report (Commonwealth of Australia 1985).” [6. Pg. 33 under RAAF]

“With the specific exception of preparations for Operation Hotbox, The RAAF was completely unprepared to deal with the contamination of its aircraft and personnel that occurred during Totem 1.” [6. Page 36 paragraph 9).

Evidence can be found at Australian participants in British nuclear tests in Australia Vol 1: Dosimetry, Page 56 at 4.3 which provides unnecessary exposure to hazards.

“In the absence of a correlation with radiation exposure, the excess of non-CLL leukaemia is unexplained. Other than radiation, the best established cause of leukaemia is exposure to benzene, but there is no information available about benzene exposure in test participants.” [7. Pg. vi para 2]

The firefighter chemical review 09 April 2018, [a] and further firefighter chemical review extension 2019 [b] provide data and information regarding chemicals, in their own chemical capacity, that Fireftrs were exposed and contaminated with, where Benzene is but one.

[a] <https://www.dva.gov.au/sites/default/files/2022-04/firefighter-chemical-review-minified.pdf>

[b] [https://www.dva.gov.au/sites/default/files/firefighter-chemical-review\\_1.pdf](https://www.dva.gov.au/sites/default/files/firefighter-chemical-review_1.pdf)

“Computer calculations have also been used to estimate the dose rates that would arise from ground contamination, and how these would change with time. For internal exposure, such as that resulting from inhalation of radioactive dusts, **virtually no monitoring data were available and only computer modelling could be used**” [7. Pg. xvi para 7]

“Major Differences between Nuclear and Chemical Reactions

- a. Nuclear reactions involve a change in an atom's nucleus, usually producing a different element. Chemical reactions, on the other hand, involve only a rearrangement of electrons and do not involve changes in the nuclei.
- b. Different isotopes of an element normally behave similarly in chemical reactions. The nuclear chemistry of different isotopes varies greatly from each other.
- c. Rates of chemical reactions are influenced by temperature and catalysts. Rates of nuclear reactions are unaffected by such factors.
- d. Nuclear reactions are independent of the chemical form of the element.
- e. Energy changes accompanying nuclear reactions are much larger. This energy comes from destruction of mass.
- f. In a nuclear reaction, mass is not strictly conserved. Some of the mass is converted into energy.” [8]

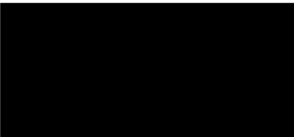
Newly listed Substance profiles of carcinogens can be found listed in the 15<sup>th</sup> report on carcinogens cumulatively with earlier substances from previous editions [9]. Clearly, the situation and exposure of chemicals to Fireftrs, and nuclear radiation to British nuclear testing personnel and persons, is what I am comparing, after all we were all exposed to life threatening chemicals and radiation.

**Request the Minister provides the following:**

- a. *RAAF Base Point Cook between 1 January 1957 and 31 December 1986* be classified as a hazardous area and be annotated in the “Under the Veterans’ Entitlements, Treatment and Support Simplification and Harmonisation 2024 No. 2004”;
- b. Failing the hazardous classification at point (1) provide that ADF Fireftrs *Point Cook between 1 January 1957 and 31 December 1986* be annotated under, and recognized as a stand-alone military mustering that was exposed to chemical hazards on a like comparison to that of, the British nuclear testing personnel; (THE REPORT OF THE ROYAL COMMISSION INTO BRITISH NUCLEAR TESTS IN AUSTRALIA Volume 1) pg. 126, 5.5.17 - 5.5.18 and pg. 135, 5.5.54 para 2 Notably....) provides exposure hazards throughout;
- c. At Number 60 After section 6B Veterans’ Entitlements, Treatment and Support (Simplification and Harmonisation) Bill 2024 No ,2004; Insert (*ADF Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986*;
- d. Due to increasing prevalence of metabolic syndrome (Mets) make available Human biomonitoring (HBM) studies for ADF Fireftrs, as HBM have presented evidence supporting the role of Endocrine Disrupting Chemicals exposures on the development of individual MetS components; [10]
- e. Mortality and Morbidity Cancer Incidence and other findings reports for *Point Cook (ADF) Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986* present similar to that at Australian participants in British nuclear tests in Australia Vol 2: Morality and cancer incidence May 2006; [11] Australian veterans (*ADF Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986* be eligible for the veterans Gold card;

- f. Recognises and compensate under the Veterans Entitlements Act 1986; the *(ADF) Firefighters who served at RAAF Base Point Cook between 1 January 1957 and 31 December 1986*; due to exposures to chemicals, and un-known chemicals by placing into point (c) above;
- g. Award the first Australian military RAAF Fire school a commemorate citation on behalf of former veterans posthumously; and to surviving veterans.

Yours Sincerely



Kim. J. Warr

Date 12<sup>th</sup> March 2024

References:

1 <https://www.nist.gov/mml/csd/chemical-informatics>

2 <https://www.khanacademy.org/science/chemistry/thermodynamics-chemistry/enthalpy-chemistry-sal/a/bond-enthalpy-and-enthalpy-of-reaction>.

3 [https://www.mt.com/au/en/home/applications/L1\\_AutoChem\\_Applications/Process-Safety/Prevent-Runaway-Chemical-Reactions.html](https://www.mt.com/au/en/home/applications/L1_AutoChem_Applications/Process-Safety/Prevent-Runaway-Chemical-Reactions.html)

4 <https://www.dva.gov.au/get-support/financial-support/income-support/support-civilians-and-participants-british-nuclear-tests>

5 [https://www.dva.gov.au/sites/default/files/dosimetry\\_complete\\_study\\_1.pdf](https://www.dva.gov.au/sites/default/files/dosimetry_complete_study_1.pdf) [Simon Harrington Commissioner Repatriation Commission 02 June 2006]

6 [https://www.dva.gov.au/sites/default/files/dosimetry\\_complete\\_study\\_1.pdf](https://www.dva.gov.au/sites/default/files/dosimetry_complete_study_1.pdf)

7 Australian participants in British nuclear tests in Australia — Vol 1: Dosimetry

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[https://chem.libretexts.org/Bookshelves/Introductory\\_Chemistry/Map%3A\\_Fundamentals\\_of\\_General\\_Organic\\_and\\_Biological\\_Chemistry\\_\(McMurry\\_et\\_al.\)/11%3A\\_Nuclear\\_Chemistry/11.01%3A\\_Nuclear\\_Reactions](https://chem.libretexts.org/Bookshelves/Introductory_Chemistry/Map%3A_Fundamentals_of_General_Organic_and_Biological_Chemistry_(McMurry_et_al.)/11%3A_Nuclear_Chemistry/11.01%3A_Nuclear_Reactions)

9 <https://www.ncbi.nlm.nih.gov/books/NBK590769/>

10 <https://pubmed.ncbi.nlm.nih.gov/34948652/>

11 [https://www.dva.gov.au/sites/default/files/mortality\\_and\\_cancer\\_incidence\\_complete\\_study\\_1.pdf](https://www.dva.gov.au/sites/default/files/mortality_and_cancer_incidence_complete_study_1.pdf)