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Queensland, [REDACTED]  
July 1, 2018.

To whom it may concern,

I am writing in support of the longstanding campaign of Mr Carl Drysdale to bring attention and action to the negative health effects of herbicide use three decades ago in Western Australia (and elsewhere) that were undertaken through government agencies (the Agricultural Protection Board in WA). I am aware of reviews undertaken including that headed by Dr Andrew Harper and Professor Bruce Armstrong well over a decade ago – which supported the link between exposure and negative health outcomes. I am also aware that the matter has been the focus of media attention, including the Four Corners program – Chemical Time Bomb – in 2013.

My interest in this issue stems from several sources. In the late 1960s and early 1970s I worked during holidays in Derby District Hospital and had the good fortune to travel extensively in the Kimberley. In the late 1980s I returned to spend some three years undertaking research across the Kimberley, visiting almost every community and most on multiple occasions. Consequently, I covered thousands of kilometres each year, criss-crossing the region. Probably the most startling change that I noted at that time by comparison to my travels twenty years earlier was the almost total absence of kangaroos and wallabies as I crossed the Fitzroy Valley. Whereas in the 1960s and early 1970s the land was teeming with native fauna – twenty years later they had vanished.

It was only subsequently that I learned about the APB spraying of the region with 2,4-D and 2,4,5-T herbicides from 1975-1985. As the impact of those highly toxic chemicals on fauna was through topical exposure and contamination of the food-chain, those mechanisms are equally relevant to the workers involved in that program (and their families) and the Indigenous (and other) residents of that region for whom native fauna formed an important part of their diet (at that time).

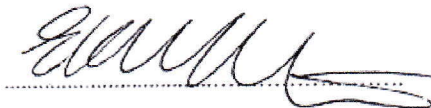
In the period between my two periods in the Kimberley I undertook specialist training in psychiatry and public health in the United States and for one year worked with the Veterans Administration in Honolulu (1980-81). Hawaii had and continues to have the highest proportion of Vietnam Veterans in the United States and in the early 1980s the full impact of PTSD was only just becoming evident. Subsequently it has become obvious that the neuropsychiatric conditions experienced by those who served in Vietnam were significant compounded among those exposed to *Agent Orange* and, further, that the neurodevelopmental impacts for children born in exposed areas of Vietnam have been catastrophic.

After returning from nearly a decade in the United States my career in psychiatry and public health has been almost entirely in remote Indigenous Australia and for a quarter-century in Cape York and the Torres Strait. It was around the time that I

learned about the use of toxic herbicides in the Kimberley that I noted a cluster of young adults with significant intellectual impairment in the Gulf, Aboriginal community of Kowanyama. That group tended to cluster by age rather than family or residence, suggesting a temporally-limited exposure of a particular cohort. Common sense and public health principles suggested that was likely to have been something to which members of the community came in contact with either during pregnancy or very early childhood. Although there are limits to the capacity to *prove* causation (that has also dogged investigations of *Agent Orange* and herbicides used in the Kimberley) – particularly when the period of exposure was several decades earlier and the numbers exposed and subsequently symptomatic small – my discussions with members of the Kowanyama Council and other residents and workers in the community were highly suggestive. It turns out that up until the early- to mid-1980s the DAIA used *Aldrin* and *Dieldrin* – highly toxic organochlorides – as insecticides, spraying the homes of the residents of that community. Further, I was informed that recommended dilution of those compounds was not done or was, at best, cursory, and one informant added that the drums were disposed of into Magnificent Creek – a billabong that in the Wet flowed into a swimming hole in which children, including adolescent girls soon to become pregnant, swam and played. The cohort of young adults with significant intellectual disability that I identified in that community in the mid-1990s are, I believe, the victims of exposure to those compounds.

My personal experience of all of the above has emphasized for me how dangerous such chemicals are and, not surprisingly, governments have banned their use (although I understand that 2,4-D is still used in Australia) . However, it was also governments and government agencies who recommended their use and supplied the chemicals originally and, consequently, there remains a duty of ongoing care to all those exposed directly or indirectly as a result of those decisions and actions. While I am not sufficiently informed about the specific circumstances of Carl Drysdale's case to comment on the complex process of determining the nature of the linkage between exposure and outcome, there appears to be no question about exposure. Further, I am aware that Mr Drysdale's campaign has been driven by wider concern for all those in the Kimberley who were unwittingly exposed, and his resolve to ensure that governments live up to their responsibilities in relation to the safety of chemicals made available within their jurisdictions AND their liabilities for past mistakes or maleficence. I am more than happy to respond to any questions.

Yours,



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