



Senator Derryn Hinch  
PO Box 33241  
Melbourne VIC 3004

Cc: [Senator.Hinch@aph.gov.au](mailto:Senator.Hinch@aph.gov.au)

20<sup>th</sup> August 2018

Dear Senator Hinch,

I am writing on behalf of the participants in the National Wild Dog Action Plan, which include national and state farming organisations, peak livestock industry councils, national livestock research and development corporations, conservation agencies, and all levels of Governments; regarding your recent comments relating to the phasing out of sodium fluoroacetate (herein 1080) a tool to manage feral animals.

Attached to this letter is a background document which provides evidence which may alleviate some of the concerns raised in your speech to the Senate on 15<sup>th</sup> August.

The participants of the National Wild Dog Action Plan are concerned that you may not be fully aware of the ramifications on native animals, farmed livestock and rural communities if 1080 were to be banned. Feral animals are estimated to cost the Australian agriculture industry \$797 million dollars in losses a year and this figure will sky rocket in the absence of 1080. More concerning however is the fact that over 300 species of native animals and wildlife already threatened by feral animals would be placed at far greater risk of extinction by feral cats, wild dogs, foxes and feral pigs if 1080 poison is banned for use in Australia.

Given the current strict regulatory framework surrounding 1080's use and the fact there are very few confirmed cases of accidental poisonings of domestic animals, in comparison to its widespread use, and no reported human health impacts at the dose rates imposed by state and federal agencies, we seek further clarification as to why your party would choose to ban the poison.

Many decades of research and additional evidence from a review undertaken by the Australian Pesticides and Veterinary Medicines Authority in 2008, has shown that 1080 is the most effective, target-specific and environmentally-sensitive toxin available for use in Australia. Moreover, there are no current alternatives that deliver the level of control required to protect livestock and native animals.

The actions of you and your party in taking this stance means that a value judgement has been made. You are choosing to place the welfare of feral animals over that of the survival of native animals and livestock, the protection of Australia's unique environment and the financial well-being of farmers and the Australian economy. This is certainly not the position of the participants of the National Wild Dog Action Plan and unlikely to be for most Australians.

I look forward to your response.

Yours faithfully,

A handwritten signature in black ink, appearing to be "Geoff Power".

Geoff Power  
Chairman, National Wild Dog Action Plan Coordination Committee

## Background information and context to 1080 use in Australia

Sodium fluoroacetate (1080) is the major control tool used to manage the impacts of invasive species on Australia's agricultural industry and environment. Invasive species are estimated to cost Australian agriculture \$797 million, through predation on livestock, disease, competition for pasture and habitat degradation. In particular, 1080 is a primary control tool for introduced predator species, such as foxes and wild dogs, which are conservatively estimated to cause more than \$130 million damage a year.

According to a report by the NSW Natural Resource Commission on the Cost of Pest Animals in NSW and Australia, Wild dogs alone cost livestock industries dearly with production losses estimated at up to \$110 million annually. The pain, however, is much greater than just economic.

The animal welfare ramifications for livestock killed or mauled by wild dogs are horrendous. These predators often attack far more individuals than they eat leaving large numbers of livestock, particularly sheep and goats, often still alive but bitten and maimed to the point they need to be destroyed. The impact of dealing with this day-in-day-out has been shown to cause landholders and farmers emotional and psychological stress similar to that of a returned Vietnam veteran (Ecker *et al* 2016). The flow-on effects to family and even rural communities as a consequence of wild dogs and the impact they have on livestock production, has seen many small thriving townships suffer as labor and productivity in those regions decline.

It is for these and many other reasons that Industry working with State and Federal Governments developed the National Wild Dog Action Plan. This plan which is Federally endorsed and funded has provided rural communities with the opportunities to manage wild dog impacts and predation through cooperative wild dog management programs which involve the use of 1080 in coordinated and on-farm management programs. Your motion to the senate will severely undermine the progress made through the Action Plan, threaten people's livelihoods and generate negative animal welfare outcomes for livestock while not offering any reasonable or proven control methods as an alternative.

In addition to the economic impacts described above, those same species also cause considerable impacts on our environment and native species. The Environment Protection and Biodiversity Conservation Act 1999 identifies that:

- Feral pigs threaten 40 native species through predation, habitat degradation and disease transmission
- Fox predation is a key threatening process for over 111 native species;
- Wild dog predation threatens at least 28 species
- Feral cat predation threatens 135 species of native animals.

While some of these native species may inhabit private land, the majority exist in protected area estate where other control techniques are limited and 1080 is the most efficient, target-specific and environmentally-sensitive control tool available. A motion to phase out the toxin 1080 may inadvertently see further species driven to extinction through increased predation in many of our national parks if these feral animals can't be adequately controlled.

In relation to the points raised in the Senate during your 15<sup>th</sup> August speech, we would like to provide some clarity around the facts which you may or may not be aware of – we have responded to the five main points outlined in your speech:

**(i) Pure Compound Sodium Fluoroacetate ('1080') poison is classified by the World Health Organization (WHO) as a Class I(a) poison – its highest rating for toxicity,**

The WHO classification system is a hazard-based classification system based on the results seen in standard toxicity studies conducted to internationally accepted test methods. The classification is typically based on the acute (single exposure) oral study in rodents. For this purpose, the pure compound, sodium fluoroacetate, is considered a 1a WHO Class poison.

However, **the pure compound is not available to the Australian public**, other than those companies authorised to possess it for manufacturing products for use in feral animal management. It would be an offence against several pieces of legislation to possess or supply the pure sodium fluoroacetate to other people for any other purpose.

The products available to people fall into three groups and all have considerably lower WHO hazard classification:

1. An aqueous concentrate containing 30g/L sodium fluoroacetate – 1b Highly hazardous
2. Oats containing 3mg sodium fluoroacetate per individual oat – 2 - Moderately hazardous
3. **A ready-to-use bait containing from 18 mg/kg to 400 mg/kg sodium fluoroacetate – 3/U - Slightly hazardous to Unlikely to present acute hazard**

The products readily available to the public for feral animal control pose significantly less health risk than the pure compound. Most people only have access to products listed under classification number 3 which the WHO considered to be only slightly hazardous. So, while the pure compound is dangerous, the suggestion that anyone would be able to access a teaspoon of powder for the purpose of killing people is not possible and any suggestion otherwise would be misleading and even scare mongering.

**ii) in Australia, 1080 is listed as a schedule 7 poison, surpassed only by addictive, illicit and other prohibited substances, and is considered a chemical of security concern by the Australian Government**

Sodium fluoroacetate is a schedule 7 poison in the Poisons Standard (Standard for the Uniform Scheduling of Medicines and Poisons SUSMP) and a chemical of security concern. For this reason, both the pure compound and all products containing sodium fluoroacetate are determined to be Restricted Chemical Products by the Australian Pesticides and Veterinary Medicines Authority (APVMA), the Australian Government regulator for these products.

As a result of both the Schedule 7 and Restricted Chemical Product status of Sodium fluoroacetate, there are significant restrictions on who can access each type of product. Authorization systems in place ensure that legal possession be given to only those people with the necessary knowledge, competencies and authorization to use them appropriately. There are also further restrictions on how the products are stored (i.e. securely locked and away from other products and unauthorized persons). All relevant states and authorities require landholders and land managers to be trained in the use and handling of 1080 products for pest animal management.

It should be noted that there are many chemicals and products that fall into the same Poison Schedule and Restricted Chemical Product status that are widely used through the country under similar conditions. These products have also been assessed by Australian Government regulators and confirmed they can be used safely when used by appropriately trained and authorized persons and in accordance with the approved label instructions.

An example is the chemical bifenthrin for termite and insect treatment. Bifenthrin is a Schedule 7 poison when present in its pure form. However, when formulated into products at concentrations of 25% or less, it is a schedule 6 poison and considered a significantly reduced risk. Similarly, bifenthrin when used as a termiticide prior to construction of a building is a Restricted Chemical Product, but other products used for domestic insect treatment containing the chemical at lower concentrations have no further restrictions applied.

There are also many other poisons kept in households that pose a far greater risk to human health, particularly to children, than those used for feral animal control by authorized and trained people, under prescribed conditions and regulations.

**(iii) despite most other countries adopting alternative, more humane, pest-management strategies, Australia and New Zealand account for the vast majority of 1080 use worldwide**

In Australia Sodium fluoroacetate is used extensively to control introduced feral animals because;

- It is a naturally occurring poison
- Is readily biodegradable being eaten by bacteria and microbes in the soils
- Dilutes to harmless compounds in water
- Leaves absolutely no residue in the environment
- Native fauna are tolerant to it in the concentrations used.

Sodium fluoroacetate is found in over 30 species of Australian native plants as a chemical defence mechanism against herbivores. Introduced feral animals and livestock are extremely susceptible to 1080 as they have not evolved with it, unlike our native marsupials.

<https://www.pestsmart.org.au/1080/>

The species targeted for control with 1080 are primarily introduced predators which are extremely sensitive to the poison so very small volumes are used in primarily meat baits for their control.

**General environmental exposure to 1080 from feral animal control programs is extremely low, as overall application rates of 1080 are commonly much less than 1 gram per hectare.**

Baits, made from meat, are usually enough to deter many Australian native herbivore species from eating the poison, however, even those that do eat meat are extremely tolerant to the poison.

For example, a goanna would need 550 times the strength of a wild dog bait – at once - to receive a lethal dose. For a wedge-tailed eagle, the lethal dose is 9.6mg/kg body weight compared to a fox at 0.1mg/kg or a wild dog at 0.6mg/kg.



Studies have shown that even the most sensitive native carnivorous marsupial on mainland Australia to 1080, the Tiger Quoll, is unaffected by the poison even when they have been found to eat meat baits injected with wild-dog-strength 1080 poison. In your own state of Victoria, where Quolls have been in decline over the past four years, the only location where their populations remain stable are those where the Victorian Government undertakes regular wild dog baiting for livestock protection in the upper Snowy River catchment, near the NSW Border.

**Comparisons cannot and should not be drawn between Sodium fluoroacetate use in New Zealand for the control of possums and deer with Australian use for the control of introduced predators. The difference in use patterns between the two countries is due to the different pest species and ecological and production impacts they pose. Greater concentrations of 1080 are required to manage herbivore and omnivore species compared to the extremely low concentrations used in meat baits for predator management in Australia. Any attempts to draw comparisons between 1080 use in NZ and Australia would be deliberately misleading.**

In other countries 1080 was banned due to the unregulated use of high concentration solutions for the control of native predators, such as coyotes and mountain lions in the US. Unlike Australia, the US, which stopped broad scale 1080 use in 1972, had a very poor regulatory framework and no concept of species-specific dose rates. This was compounded by unfettered public access to 100% solution, and a large range of native predators and scavengers susceptible to the poison which led to unacceptable non-target impacts.

**In Australia, 1080 is only available in diluted form in pre-prepared baits.**

Personnel handling 1080 must be accredited and trained via state-coordinated training programs with regular refresher courses. To further ensure the safe and responsible use of 1080, Stage 3 of the NWDAP has just launched a new professional pest animal controller competency to encourage the development of more professionals in the feral animal control space.

Many of the so-called humane pest management activities carried out in other countries are not suited to Australian agricultural systems and are only marginally effective in those countries. Non-lethal control techniques, such as those employed the US, only work in the presence of ongoing lethal control of predator populations to reduce conflicts with livestock.

Similarly, the scale of livestock production and size of US properties are not comparable with those in Australia. For instance, here the use of fulltime herders in the presence of guardian dogs with sheep is not feasible because our scale and size of production is huge by comparison to the US. Over 90% of American ranchers who use guardian dogs to protect livestock from predation by coyotes, run less than 100 head of sheep. This is hardly comparable to Australia.

Non-lethal techniques are supported here in Australia and are used as part of integrated feral animal control programs to manage livestock and production impacts. They have limited effectiveness if feral animal populations are not reduced through broad scale, 1080-based, control programs.

These non-lethal controls are of no benefit to protecting our native species from predation in national parks and state forests. Consequently, the phasing out of 1080, as described in your motion, will not offer any solutions for protecting our native fauna and threatened ecological communities from feral animals.

**(iv) 1080 poison is a cruel alternative to other known methods of pest control, including poisons with effective antidotes.**

While other pest control options are available and integrated into current feral animal control programs, baiting programs with 1080 poison are by far the most effective, efficient, target-specific and environmentally sensitive tool we have, to manage feral animal populations for the protection of agricultural AND environmental assets.

The fact that 1080 is a naturally occurring toxin in Australia, is biodegradable and does not affect our native fauna in the concentrations used, make it the most applicable control tool available.

Other control techniques such as trapping and shooting are utilised more specifically to target problem animals once they have become killers and are randomly attacking and killing livestock.

Trapping and shooting are labour intensive and not suitable for broadscale management programs. These tools, when used in conjunction with 1080 baiting as part of an integrated strategic control program, can provide significant reductions in stock loss and native species' conservation.

The poison you refer to with an antidote, Para-aminopropiophenone, (PAPP) was developed, tested and registered through the former Invasive Animals CRC and its commercial partners. The recent approval of PAPP provides a complementary management tool to 1080. PAPP it does have an antidote, however it is necessary to have the affected animals treated by a vet within 30 min of ingesting a bait. This means that it may not be possible to administer the antidote fast enough in remote locations. This requirement to administer the antidote within 30 min restricts the use of PAPP to areas in close proximity to a vet such as around towns and in peri urban areas on the outskirts of cities, significantly reducing its applicability.

PAPP is also less species specific than 1080 and many of our native animals may be at risk from the poison. It is not suitable for managing feral animals in national parks and state forests due to the risks associated with non-target bait uptake by susceptible native animals.

**(v) 1080 poison is aerially distributed across Australia, including often untracked use throughout national parks, leaving other species and domesticated animals susceptible to agonising deaths that can last as long as five days;**

Australia is a world leader in coordinated strategic feral animal control programs in which 1080 plays a vital role. Baiting programs are strategically coordinated across states, regions and local communities. There is nothing unmeasured or unaccounted for in Australia's baiting programs. As discussed previously and mentioned in your speech Sodium fluoroacetate is a Restricted S7 poison, so the notion it is distributed in an unmanaged fashion in national parks is either deliberately misleading or simply misguided.

Aerial baiting for wild dogs using 1080-poisoned meat baits cannot be considered untracked when it is highly targeted and regulated. Aerial baiting on public and private land is:

- Used at strategic times of the year to target the pest species ecology and to protect agricultural and environmental assets;
- Used to deliver control to inaccessible areas where wild dogs and pest animals are known to travel
- Mapped by aircraft using advance GPS navigation and recording equipment



- Regulated by state agencies, permits and authorisations must be in place before baiting occurs
- Delivered in conjunction with ground baiting and trapping programs on adjoining private properties so that an effective coordinated management program is delivered.
- Determined through extensive local community group planning and consultation.
- Conducted on national parks by government agencies under relevant state regulations

As discussed previously, non-target uptake of baits by native fauna is managed through using the appropriate dose rates and bait substrates. The fact that 1080 baiting to reduce introduced predators such as wild dog, foxes and feral cats has played a huge role in conserving many of Australia's rare and threatened fauna, including iconic species such as the Koala, Bridled Nail-tail Wallaby and southern Hairy nosed wombats, clearly demonstrates it has limited impacts on native fauna and is an essential conservation management tool.

People should be aware it is illegal to have domestic animals, including pets, in national parks. However, in satisfying state and federal regulations, any baiting program as part of its planning process (be it on private or public land), must have signage in place indicating baiting is taking place and all neighbours must be notified prior to baits being deployed. The time frames for notification and signage requirements vary between states and territories but all have these obligations in place.

Your comment regarding the time to death is unlikely to occur here in Australia given the dose rates and meat substrates used for predator management. Instances of animals taking five days to succumb to the effects of 1080 poisoning seems more likely to have originated from NZ where domestic stock eating pellets with high concentrations of 1080 may possibly suffer prolonged deaths, but we have no evidence of that here in Australia. However once again caution needs to be taken when comparing 1080 baiting patterns and use from NZ to Australia.

Unfortunately, despite these regulations and notification processes, domestic pets primarily dogs are occasionally accidentally killed by baiting programs. A four-year review into the use of 1080 conducted by the Australian Pesticides and Veterinary Medicines Authority (APVMA) in 2008 found in most cases accidental deaths resulted from domestic dogs wandering onto properties where baits had been laid including within national parks. This is often despite the owners being notified and aware baiting programs were taking place. Be assured, all reported incidents of accidental poisoning are investigated by the relevant state government authority and any breaches in regulations or misuse is dealt with at a state level.