

Dear Committee Secretary,

The Commonwealth Radioactive Waste Management Act 2005 should be repealed. The act, which was imposed by the Howard government of 2005, is an undemocratic law allowing the federal dump to be forced on the NT despite opposition from Traditional Owners, the broader NT community and the NT Government.

The Problem:

Nuclear waste exists on a timescale beyond common human reckoning. The radioisotopes of Uranium-238 and Uranium-235 have half-lives of 4.5 billion years and 0.7 billion years respectively, i.e. after the fulfillment of those half-lives the radioactivity will only be decreased by half. Uranium is highly poisonous owing to its chemical characteristics, and additionally produces many daughter particles during its radioactive decay that are as dangerous or more dangerous than Uranium itself. Nuclear waste is hazardous to biological activity and stays hazardous for millions of years.

Our Blood Line Will Continue:

As surely as 10,000 years has passed since the waning of the most recent ice age and the development of agriculture and civilization has spread world-wide, another 10,000 years will pass henceforth and onward *ad-infinitum*, as surely as each day now does, and our descendants will bear the nuclear burden we place upon them. I expect to have descendants alive in that time who will find enjoyment in the gift of life, the experiences and challenges of growth, and the maturity into adulthood with wisdom in just the same way that we do today. I expect my descendants to settle and migrate as their culture and the landscape allows, without bearing the poisonous and radioactive legacy of their wasteful and short-sighted forbearers.

The very lands that are now considered for dumping nuclear waste may in the future be prime land sought to be cultivated. Although we are now collectively eager to create, consume, waste, and dispose, it is wrongful for us to impose upon our descendants a legacy of poisonous waste that will impede or wholly undermine their migration and settlement. It is our descendants' right to live in a healthy world and it is our responsibility to uphold that right.

Despite our engineers' designs and promises regarding the long-term effectiveness of nuclear waste storage techniques, we are not protected from our continent's inherent behaviors including but not limited to the occurrence of climate change, fault propagation allowing increased subterranean water flow, and tectonic upheaval. The fences and signs we erect today to ward off trespassers from nuclear waste sites will corrode away; the land may be inundated by a shallow sea or gouged by river or stream systems. Although generally operating on timescales beyond those considered politically, these examples of Earth's dynamic behaviors are nevertheless real and may facilitate the dangerous exposure of radiation and poisonous substances to the wildlife and the future cultures of people—our descendants—that will inhabit Australia.

Long-Term Solutions:

It is essential that a long-term solution to the problem of what to do with nuclear waste is created. I recommend that the Australian government invests research into the already developing method of disposing waste via placing it within the descending tectonic plate of a subduction zone. In such a case the subducting tectonic plate behaves as a vehicle to transport the nuclear waste into Earth's mantle and towards its core as a rate faster than the radiation can re-ascend through the crust. Although the implementation of such a practice may require greater capital than other methods on the table, it will ensure that human kind and wild life will be literally forever free of the malignities of nuclear waste.

I ask that you take all initiatives within your power to ensure that our own and our descendant's future is free from nuclear waste dumps. Please repeal the the Commonwealth Radioactive Waste Management Act 2005.

Sincerely,

Anson Antriasian