SHOULD AUSTRALIA BECOME THE WORLD'S NUCLEAR WASTE DUMP?

Anti-Nuclear & Clean Energy (ACE) Campaign Friends of the Earth, Australia www.nuclear.foe.org.au/ March 2018

From 2015 to 2017, the South Australian (SA) government was considering a proposal to import 138,000 tonnes of high-level nuclear waste (about one-third of the world's stockpile) and 390,000 cubic metres of intermediate-level nuclear waste as a money-making venture. A Royal Commission endorsed the proposal but multiple levels of bias undermined the credibility of the Commission and its report was littered with errors and glaring omissions.

Aboriginal Traditional Owners: Tauto Sansbury, Chairperson of the Aboriginal Congress of SA, said: "In our second meeting with [Royal Commissioner Kevin Scarce] we had 27 Native Title groups from all around SA. We had a vote on it. And it was unanimous that the vote said no we don't want it. It was absolutely unanimous. Commissioner Scarce said well maybe I'm talking to the wrong people and we said well what other people are you going to talk to? We're Native Title claimants, we're Native Title Traditional Owners from all over this country ... this land ... so who else are you going to pluck out of the air to talk to ... we've stuck to our guns and we still totally oppose it. That's every Native Title group in South Australia."

Aboriginal people in South Australia are strongly opposed to the nuclear dump plan – see the statements posted at www.anfa.org.au/traditional-owners-statements/

Economics: How much money might be made by taking nuclear waste from other countries? There is no precedent to base an estimate on. There may be countries that would be willing to send nuclear waste to Australia for storage and disposal but there are many reasons why countries may choose other options. Thus there is a great deal of uncertainty about potential revenue, and it is far from certain that revenue would exceed the Royal Commission's \$145 billion estimate of the costs associated with the project. The economic case presented by the Royal Commission was strongly challenged by economist Prof. Richard Blandy, by The Australia Institute and others. Yet those critiques were ignored by the Royal Commission and by the SA government.

Contradictions: The Royal Commission glossed over major contradictions in its proposal. For example the assumption is that high level nuclear waste will first be imported for



storage to accrue funds to build a repository. But what if efforts to establish a repository come to nothing – as they have in many other countries? South Australia will be stuck with thousands of tonnes of nuclear waste, most likely on the Eyre Peninsula or the west coast, with no capacity to dispose of it and no return-to-sender clause.

The Royal Commission glossed over the fact that Australia has not yet been able to find a disposal site for our own relatively small stockpiles of low and intermediate level waste. Attempts to impose a national nuclear waste dump in SA by the Howard government failed. Later attempts to impose a dump in the NT failed. And the current attempt to impose a national dump in the Flinders Ranges in SA is being fiercely opposed and will almost certainly fail.

So the proposition is that Australia should accept high level nuclear waste even though attempts to manage low and intermediate level waste have been unsuccessful. And the proposition is that Australia should accept vast amounts of foreign waste even though we have not yet found a solution for Australia's much smaller stockpile of waste. Those propositions are reckless and irresponsible.

Public health and environmental risks: The risks associated with the nuclear dump proposal are profound. Professor John Veevers from Macquarie University wrote in *Australian Geologist* about the risks associated with a high level nuclear waste repository: *"Tonnes of enormously dangerous radioactive waste in the northern hemisphere, 20,000 kms from its destined dump in Australia where it must remain intact for at least 10,000 years. These magnitudes – of tonnage, lethality, distance of transport, and time – entail great inherent risk."*

No country has completed construction of a deep underground repository for high level nuclear waste. There is one deep underground repository for intermediate level waste – the Waste Isolation Pilot Plant (WIPP) in the USA – but it was closed for three years due to a chemical explosion in one of the underground nuclear waste barrels in February 2014.

Initially high safety and regulatory standards at WIPP gave way to complacency, cost-cutting and corner-cutting in the

space of just 10–15 years. The Royal Commission notes that high level waste "requires isolation from the environment for many hundreds of thousands of years". How can we be confident that high safety and regulatory standards would be maintained over centuries and millennia when WIPP shows that the half-life of human complacency, cost-cutting and corner-cutting is measured in years or at most decades?

There is no logical reason to believe that the SA government would perform any better than the U.S. government. In fact there are good reasons to believe that nuclear waste management would be more difficult here given that the US has far more waste management expertise and experience than Australia.

The Royal Commission had little or nothing to say about other problems overseas, e.g. fires at radioactive waste repositories, the current project to exhume 126,000 waste barrels from a dump in Germany following extensive water infiltration and corrosion, the liquid nuclear waste explosion at Mayak in the USSR, and many others.

Australia's track record: Australia has a history of mismanaging nuclear waste. Nuclear engineer Alan Parkinson states: "The disposal of radioactive waste in Australia is ill-considered and irresponsible. Whether it is short-lived waste from Commonwealth facilities, long-lived plutonium waste from an atomic bomb test site on Aboriginal land, or reactor waste from Lucas Heights. The government applies double standards to suit its own agenda; there is no consistency, and little evidence of logic."

A case in point is the botched 'clean up' of the Maralinga weapons test site under the Howard government. A number of scientists with inside knowledge complained about the deficient management of the project. Alan Parkinson said of the 'clean up': "What was done at Maralinga was a cheap and nasty solution that wouldn't be adopted on white-fellas land." U.S. scientist Dale Timmons said the government's technical report was littered with "gross misinformation". Geoff Williams, an officer with the Commonwealth nuclear regulator ARPANSA, said the 'clean up' was beset by a "host of indiscretions, short-cuts and cover-ups". Nuclear physicist Prof. Peter Johnston said there were "very large expenditures and significant hazards resulting from the deficient management of the project".

There are other contaminated sites in SA. A radioactive waste repository at Radium Hill, for example, "is not engineered to a standard consistent with current internationally accepted practice" according to a 2003 SA

government audit. The Port Pirie uranium treatment plant is still contaminated over 50 years after its closure. It took a six-year community campaign just to get the site fenced off and to carry out a partial rehabilitation. As of July 2015, the SA government website states that "a long-term management strategy" is being developed for the contaminated Port Pirie site.

If there was some honesty about the mismanagement of radioactive waste in SA, coupled with remediation of contaminated sites, we might have some confidence that lessons have been learnt and that radioactive waste will be managed more responsibly in future. But there is no such honesty from the state government, and there are no plans to remediate contaminated sites. On the contrary, the plan is to make a bad situation much worse with the importation of vast amounts of intermediate and high level nuclear waste.

A moral argument? Some argue that Australia has a moral responsibility to accept nuclear waste arising from the use of Australian uranium in power reactors overseas. However the responsibility for managing nuclear waste lies with the countries that make use of Australian uranium. There are no precedents for Australia or any other country being morally or legally responsible for managing wastes arising from the use of exported fuels, or from the export of any other products. If any moral responsibility lies with Australia, that responsibility arguably rests with the uranium mining companies (which are foreign-owned or majority foreign-owned) rather than with Australian citizens or federal or state governments.

More information:

www.nuclear.foe.org.au/waste-import

www.nodumpalliance.org.au

How South Australians won the campaign against an international high-level nuclear waste dump. Fabulous book / e-book www.nodumpalliance.org.au/standing_strong

Links to the Royal Commission and other literature: www.nuclear.foe.org.au/waste-import/#sources