

Thank you for the opportunity to comment on the tentative findings from the Nuclear Royal Commission Fuel Cycle (NFCRC). Unfortunately, the report has raised more questions than it has answered. Given that this issue will leave South Australia (and Australia) with a multi-century legacy of waste to manage, I believe significantly more work needs to be undertaken before a fully informed decision can be undertaken.

I have a large number of concerns arising from a proposal that seeks to store highly toxic waste in my home State for a period longer than the entire existence of the human species. Never-the-less, I restrict my submission to my some key points:

- 1) Given that infrastructure projects typically run over time and over budget, an evidence based approach to expected cost overrun needs to be undertaken. To ensure that cost overruns have been properly anticipated and accounted for, I strongly recommend that the NFCRC investigate the error margin between expected costs for establishment of complex infrastructure projects (such as a nuclear waste dump or a nuclear power plant) at proposal and the actual cost upon completion. Expected cost over runs should be based on actual scientific evidence of cost over runs around the world rather than a “guestimate” based on conventional accounting practice as the consequences of making a mistake in this area are potentially catastrophic.
- 2) Even with this additional research to inform the cost forecasts, the NFCRC must have a course of action, agreed to by the community prior to commencement, on what will happen if expenses are greater than revenue. Specifically, in the event of a severe cost overrun, how will high level nuclear waste be managed and who will pay for this management?
- 3) It is currently South Australian law that “no public money may be appropriated, expended or advanced to any person for the purpose of encouraging or financing any activity associated with the construction or operation of a nuclear waste storage facility in this state.”

Part B of the Nuclear Fuel Cycle Royal Commission Terms of Reference states:

“Detailed consideration and analysis is required to be given to the potential of South Australia’s further participation in the nuclear fuel cycle, whether through the expansion of the current level of exploration, extraction and milling of minerals containing radioactive materials and nuclear substances, the establishment and operation of facilities to generate electricity from nuclear fuels or the establishment of facilities for the management, storage and disposal of nuclear waste, and to the risk and opportunities that those activities would present”

Given that a feasibility study is always the first step in any large infrastructure project and that the NFCRC Tentative Findings are effectively a feasibility study, how is this activity NOT “encouraging ... any activity associated with”....the construction or operation of a nuclear waste storage facility?

As a South Australian citizen, I am very concerned by what appears to be a disregard for the rule of law. This is particularly concerning as the nuclear industry across the world has a somewhat tarnished reputation when it comes to transparency and compliance with legal requirements. Any lack of confidence in the rule of law (whether perceived or real) will be extremely detrimental to this project and to South Australia as a democratic state.

- 4) Given that “leasing” the radioactive material would make BHP uranium significantly more attractive on the international market, certainly resulting in increased profits for the company, why wouldn't the South Australian community think that the recommendation to set up a nuclear waste dump was motivated in large part to serve the interests of BHP?
- 5) Given that the South Australian people would be the ultimate underwriters of insurance for any nuclear waste dump and associated accidents over the next one hundred thousand years, has the NFCRC undertaken scenario analysis to explore the costs of different accident scenarios? Given the size of the South Australian economy, will the Commonwealth be the ultimate underwriter and if so, does the NFCRC intend to undertake consultation nationally to see if the Australian public accept this responsibility?
- 6) Has the NFCRC incorporated the potential impacts of climate change on the ecology and geology the State? It is essential that some scenario planning for climate change impacts be included in the assessment as conditions in the next one hundred years are likely to be very different to those experienced in the last 100 years.

**A high level nuclear waste dump is a permanent solution to a temporary problem.** Voluntary importation of one of the deadliest substances known to humanity, with all of its intransigent problems (which no country in the world has yet managed to resolve) may indeed prove to be a poisoned chalice. Indeed, the x billions anticipated as revenue are minor in global economic terms, and definitely insignificant given the 240,000 year time frame of the proposal.

I ask that that the NFCRC explore the following questions thoroughly and make their findings publicly available before making recommendations to the South Australian community via the South Australian Parliament.

I encourage the South Australian government to look past the NFCRC towards clean, renewable solutions to economic development - solutions that will benefit communities today and into the future.