Nuclear fuel waste storage targets SA’s iconic Flinders Ranges

Briefing paper (Jan 2017) by David Noonan, Independent Environment Campaigner

The “National Radioactive Waste Management Facility” (NRWMF) is really two dumps in one:

- **The Reactor’s nuclear waste dump**: An above-ground Store, intended to operate for 100 years, primarily for irradiated nuclear fuel wastes and Long Lived Intermediate Level (LLIL) wastes from ANSTO’s Lucas Heights Research Reactor site that require isolation from the environment for over 10,000 years;

- **A near-surface radioactive waste disposal**: To bury Short Lived Intermediate Level wastes which require isolation for approx. 300 yrs, along with various Low Level radioactive waste.

The Federal government tries to downplay the higher order safety issues associated with the Store.

The Federal Liberal government proposal to impose a Store for nuclear fuel wastes in SA has a lot in common with the State Labor government proposal for an International nuclear waste dump:

- Nuclear wastes affect the rights, interests and safety of all South Australians and target Aboriginal communities in a serious threat to their human rights, culture and country;

- Both proposed nuclear dumps are illegal in SA under the *Nuclear Waste Storage (Prohibition) Act 2000*. The import, transport, storage and disposal of all these nuclear wastes is prohibited: “to protect the health, safety and welfare of the people of SA and to protect the environment in which they live”;

- Both dumps entail long term above-ground storage of nuclear fuel wastes without any waste disposal capacity. Safety is compromised by the import of nuclear waste to SA;

- Both nuclear waste dumps represent a multi-generational threat to community interests. If imported, these reactor nuclear wastes are highly unlikely to ever leave SA;

- Both require use of an as yet unnamed port in SA: with nuclear fuel waste intended to be shipped into an SA port from the UK in 2020, and from Sydney and from France over four decades, and then moved by rail or truck to the proposed Store site in the Flinders Ranges;

- Both dumps expose SA to security and terrorism risks in shipping and transport and in long term above-ground storage of nuclear fuel wastes and LLIL reactor wastes;

- In each case the proponent has failed to be transparent on required port and transport route issues. The Federal government is failing to consult affected communities across SA.

Having faced up to the threat of an International nuclear waste dump, communities across SA are now increasingly contesting Federal imposition of the NRWMF on Adnyamathanha lands in SA’s iconic Flinders Ranges. The Federal Cabinet are due to make a decision by late 2017.
Aboriginal rights and interests must be respected by both Federal and SA governments:

In responding to the Federal government, SA Premier Weatherill must commit to support an Adnyamathanha community right of veto over proposed nuclear waste dumping on their land in the same way that the Premier has committed to provide Aboriginal communities a right of veto over proposed International nuclear waste facilities (Jay Weatherill The Advertiser, Nov 18, 2016):

“...local Aboriginal people would be given a final right of veto on any future facility.
“A key finding of the citizens’ jury was the importance of listening to local Aboriginal communities. Their evidence to the jury was compelling.
“This final right of veto would exist if a proposed facility would affect their lands and would not be overridden by the broader community.
“Their voice must be heard and their consent is essential.”

The Federal Minister holds a draconian discretion under the National Radioactive Waste Management Act 2012 (NRWMA) to over-ride both Federal and State Aboriginal Heritage Acts.

Sec.12 & 13 of the NRWMA state that “the significance of land in the traditions of Indigenous people ... has no effect to the extent that it would regulate, hinder or prevent” actions authorised by Sec.11 Selecting the site for a facility. SA community must come together to see that this doesn’t eventuate.

In the lead-up to the SA State Election in March 2018, the public expect the ALP, the Liberals and the Xenophon Team to support community and to reject the Federal imposition of illegal waste dumps.

The proposed reactor nuclear waste Store in the Flinders Ranges is unnecessary:

The existing “Interim Waste Store” (IWS) at Lucas Heights has already received reprocessed nuclear fuel waste from France and was built with a design life of 40 years and a plan for its operations so that it may also accommodate the reprocessed wastes to be received from the UK in 2020.

Lucas Heights is the best placed institution and facility to responsibly manage Australia’s nuclear fuel wastes and can do so throughout the proposed operating period of the Opal Research Reactor.

The ARPANSA “Regulatory Assessment Report” on operations of the IWS (May 2015) considered ANSTO contingency planning for the IWS to operate for longer than 40 years and to also potentially store reprocessed nuclear fuel waste “until the availability of a final disposal option”.

ANSTO reactor wastes represent the vast majority of LLIL wastes intended to go to a remote Store.

ANSTO currently holds approx. 520 m$^3$ of LLIL wastes, with approx. 500 m$^3$ of LLIL to arise from HIFAR reactor decommissioning in 2024, and an expected further approx. 500 m$^3$ of LLIL waste over Opal reactor operations through to the 2050’s: totalling approx. 1520 m$^3$ of ANSTO LLIL wastes.

In contrast: other federal agencies hold approx. 100 m$^3$ of LLIL wastes and States & Territories hold a total of 105 m$^3$ of LLIL wastes – largely historical wastes with only minor projected future arising’s.

The existing IWS also provides a means to store LLIL wastes from ongoing Opal reactor operations.