

**Public Submission 3 – Mr Jim Green,
Friends of the Earth Australia**



Submission to ARPANSA re ANSTO Intermediate Level Solid Waste Storage Facility, Lucas Heights, NSW

**Friends of the Earth Australia
nuclear.foe.org.au/waste**

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In broad terms Friends of the Earth Australia supports the proposal for additional storage capacity for intermediate-level waste (ILW) at the Lucas Heights site operated by the Australian Nuclear Science and Technology Organisation (ANSTO) but with qualifications and proposed modifications.

The plan to increase storage capacity for "at least 10 years to 2037" is imprecise and ANSTO should be asked to clarify. ARPANSA obviously cannot modify the licence application but ARPANSA's response to the application could note that:

- i) The likelihood of an offsite ILW disposal option by 2037 is zero, and
- ii) It is doubtful whether an interim offsite storage option (at Kimba) will be available by 2037 and in any case that plan is problematic.

Concerted efforts to establish offsite storage and disposal options for ANSTO's waste have been ongoing since the late 1990s ... almost a quarter of a century. Every previous attempt has failed. The current plan for interim above-ground ILW storage at Kimba is i) breathtakingly stupid (see below) and ii) likely to fail. The current plan for increased storage at ANSTO will likely be followed by yet another proposal to expand ILW storage at ANSTO in a decade or so. It would be cheaper and more efficient to advance longer-term interim storage now.

ANSTO should be asked to develop costed proposals for ILW storage until such time as an ILW *disposal* pathway is available, which in the best-case scenario would be well beyond 2037.

ANSTO's current plan is premised on the non-availability of Waste Acceptability Criteria (WAC), which is said to be the responsibility of the Australian Radioactive Waste Agency (ARWA). ARPANSA could recommend that the development of WAC be expedited, and the current plan to increase storage capacity at ANSTO put on hold pending reconsideration of the option of building a Waste Conditioning (Processing & Packaging) Facility at Lucas Heights. The non-availability of WAC is said by ANSTO to be the reason this option has been rejected; however we wonder whether other factors are at play e.g. an unwillingness to ask

for the requisite funds and/or an unwillingness by the government to provide the requisite funds.

We ask ARPANSA to recommend that WAC should be established by ARPANSA or some other independent party and not by ARWA, for two reasons:

- i) ARWA is a government agency whereas ARPANSA has a greater degree of independence. ARWA establishing WAC is putting the fox in charge of the hen-house. ANSTO already has a history of dishonestly classifying radioactive waste on politically expedient grounds instead of scientific grounds, e.g. its insistence that high-level nuclear waste is not produced at Lucas Heights even while it (reluctantly) concedes that irradiated/spent nuclear fuel meets both the radiological and heat criteria for classification as high-level nuclear waste. As long ago as 1993 the Research Reactor Review said that ANSTO should stop lying about the high-level nuclear waste it produces, yet the deceit continues to this day. ARPANSA's response to the licence application should note that i) high-level nuclear waste is produced at Lucas Heights and ii) ANSTO should stop lying about that fact. We are also concerned about the potential for ILW to be expediently reclassified as low-level waste, or low-level waste to be classified as non-radioactive waste, through ANSTO's manipulation of WAC.
- ii) The department and ARWA have a track-record of mismanagement and incompetence (we can provide further information on request and see also the troubling accusations in Senator Rex Patrick's contribution to the Sept. 2020 Economics Legislation Committee report¹).

The plan for interim above-ground ILW storage at Kimba

The plan for interim above-ground ILW storage at Kimba is illogical and irresponsible. It is sold as an 'interim' measure but would last for several decades at least, and ARPANSA envisages it could last a century or more. ARPANSA states in its May 2017 'Information for Stakeholders' document that the proposed above-ground ILW store "may be operational for more than a century" and the same wording can be found in ARPANSA's May 2017 'Regulatory Guide' document.

Essentially the plan involves moving waste from interim above-ground storage at a relatively secure site (ANSTO) to a site (Kimba) with minimal security (a couple of security guards at best).

The plan involves moving above-ground waste storage from a site (ANSTO) with a plethora of nuclear experts who are capable of managing problems as they arise, to a site (Kimba) with zero nuclear experts.

The plan inevitably involves unnecessary double-handling of ILW given that Kimba could not meet the criteria for deep underground disposal of ILW. Double-handling inevitably increases safety risks and costs.

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https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/RadioactiveWaste/Report/section?id=committees%2freportsen%2f024458%2f73825

ARPANSA should recommend that:

- i) ILW should be stored at ANSTO until a disposal option is available.
- ii) The management of lower-level wastes and ILW should be separated given that different disposal criteria apply. This common-sense separation was adopted by the Howard government in the early 2000s.

Of relevance in this regard is the November 2013 advice from ARPANSA's Nuclear Safety Committee that dual-handling transport for interim storage "does not represent International Best Practice" and "also has implications for security".

Unconscionable racism

The willingness of the federal Coalition government to impose a radioactive waste 'facility' on Barngarla country against the will of Barngarla Traditional Owners is unconscionable. The formal nomination of the Kimba site will be followed by a judicial challenge by the Barngarla Determination Aboriginal Corporation. That judicial challenge has a good chance of success, as indicated by the Coalition government's years-long effort to shield the planned dump from judicial challenge.

It was sickening and disgusting to witness ANSTO acknowledge Traditional Owners at the recent ARPANSA forum and then to enthusiastically support the proposed Kimba 'facility' ... that is unanimously opposed by Barngarla Traditional Owners. ANSTO should be held to account for its crude racism and its hypocrisy.

ARPANSA should flag in its response to the current licence application that dumping or storing waste on Barngarla land despite their unanimous opposition will not be countenanced in future licence applications; or at the very least it will weigh heavily in the net-benefit assessment that the ARPANSA CEO is required to make.

ARPANSA literature states:

"ARPANSA respectfully acknowledges the Traditional Owners and Custodians of Country throughout Australia and their continuing connection to land, waters and community. We pay our respect to Aboriginal and Torres Strait Islander Peoples, their cultures, and to Elders past and present."

That being the case, now is the time for ARPANSA to make it clear that ARPANSA will not licence any proposed facility that is unanimously opposed by Barngarla Traditional Owners.

Secret ANSTO reports

A Department of Industry, Innovation and Science public newsletter (Issue No. 8, April 2017) stated that ANSTO is licensed by ARPANSA to store waste "on the condition that a plan is developed by the end of the decade for a final disposal pathway for its waste."

Further to the above, our understanding is that ANSTO submitted two relevant reports to ARPANSA in mid-2020 but they have not been publicly released despite requests for public access. We ask the Public Works Committee to demand access to these reports, to publicly

release them, and to call for a further round of public submissions informed by the ANSTO reports.

ARPANSA should release those reports immediately.

ANSTO's sub-standard safety record

ARPANSA made 85 recommendations to improve safety at Lucas Heights in a 2018 report. ARPANSA's response to the licence application should include an update regarding i) ANSTO's progress in implementing those recommendations and ii) whether ARPANSA believes the safety culture at ANSTO has improved more generally.

Our experience following ANSTO's activities and antics – stretching back over decades – is that ANSTO has strong bilateral political support and thus there is insufficient incentive for ANSTO to improve its safety record. The string of accidents from the mid- to late 2010s was preceded by the disturbing whistleblower revelations from 2007 onwards.² Then in [REDACTED] time in the 1990s there were farcical incidents such as water intrusion into ANSTO's 'dry' store for spent nuclear fuel storage followed by multiple accidents trying to fix that problem, including the exposure of four workers to ionising radiation.

ANSTO's waste specialist [REDACTED] said several years ago that most of what he knows about waste accidents at ANSTO comes from Friends of the Earth. That speaks volumes about the substandard safety culture at ANSTO and the flippant, indifferent attitudes that exist there.

Replacement of ARPANSA CEO

Friends of the Earth monitored ARPANSA's activities closely during the first 10 or so years of its existence, during which time ARPANSA repeatedly flunked.³ We have not monitored ARPANSA nearly so closely since then but we fear that the current, competent CEO of ARPANSA could be replaced by a compliant, ineffective CEO as was the case when ARPANSA was created.

We fear that the government may allow ANSTO to play a role in selecting its own regulator, as was the case when ARPANSA was founded. ANSTO CEO [REDACTED] sat on the interview panel which interviewed applications for the position of CEO of ARPANSA. [REDACTED] said she was just one of three (or four) people on the interview panel. ANSTO's PR person [REDACTED] said he could not defend the indefensible.

What happens when ANSTO is involved in selecting its own regulator? Amongst many other problems, we got a CEO ([REDACTED]) who didn't see a problem with ANSTO being involved in selecting its own regulator. He repeatedly refused requests to state that ANSTO should not be involved in selecting its own regulator. More serious problems included [REDACTED]'s insistence that the clean-up of radioactive waste at Maralinga was 'world's best practice' even though

² <https://nuclear.foe.org.au/ansto-whistleblower-saga-2007-ongoing/>

³ <https://nuclear.foe.org.au/arpansa-australian-radiation-protection-and-nuclear-safety-agency/>

it breached Australian and international safety standards and resulted in four scientists publicly voicing concerns about the sub-standard clean-up.⁴

The Howard government wasn't going to let a serious regulator upset its pet project – the replacement research reactor. We fear that the Morrison government will install a puppet regulator so as not to disrupt plans for nuclear-powered submarines and any other nuclear projects it has in mind.

⁴ <https://nuclear.foe.org.au/flawed-clean-up-of-maralinga/>