

Title: Key explanatory ARPANSA quotes on nuclear waste management in Australia

Secure storage of ANSTO nuclear waste at Lucas Heights has been extended out to 2037 by the federal nuclear regulator ARPANSA (16 March 2022) see:

[ARPANSA approves siting licence for ANSTO waste facility | ARPANSA](#)

In light of this established alternative there is no reason to proceed with discredited proposals for *indefinite* above ground storage of ANSTO nuclear wastes near Kimba on Eyre Peninsula in SA.

"An important consideration in granting the ILWCI siting licence was the conceptual safety and security design of the facility", says Dr Carl-Magnus Larsson, Chief Executive Officer of ARPANSA.

This follows a \$60 million investment by the federal gov in extended storage at Lucas Heights.

A detailed Statement of Reasons (SOR) and the Regulatory Assessment Report (RAR) for the newly issued licence to site the ILWCI Facility at Lucas Heights can be found in the following documents:

 [Regulatory Assessment Report - A0339 Siting Licence for ILWCI Facility \(RAR\)](#)

 [CEO Statement of Reasons - A0339 ILWCI Facility Siting Licence Application – \(SOR\)](#)

see key quote from ARPANSA's Approval of extended nuclear waste storage at Lucas Heights:

SOR p.24 see ARPANSA states nuclear waste storage at Lucas Heights can continue for decades up to the availability of a final disposal facility for ILW:

3.8.2 Conclusions

... this inevitably leads to continued production and increased storage of ILW at Lucas Heights. In my opinion and as argued in this Statement of Reasons, this can safely continue over the next decades pending the establishment of facilities for final management of radioactive waste, including a disposal facility for ILW for which no concrete plans are currently available.

SOR p.23 the CEO states storage is only an interim measure, calls for final disposal pathways ASAP:

I also reiterate that storage is not the ultimate solution but, by definition, only an interim measure. ... ARPANSA wants to emphasise that national solutions should be sought, plans developed, and facilities established for all radioactive waste stored, and over the coming years generated, in Australia; this will contribute to elimination of the need for specific storage facilities where radioactive waste may accumulate over long periods of time without a defined disposal pathway – or any disposal facility in sight.

I am aware that development of conceptual models for ILW disposal is under way, ... it is desirable that this process commences as soon as practicable, but is given great care and the necessary time required to receive the requisite technical approval and 'social licence'.

SOR p.22 the CEO states an ILW disposal facility requires a different site to the Kimba NRWMF site:

... I consider the continued supply of nuclear medicine to be a priority and that the waste management issues it raises to be manageable over the next decades. ... this decision also refers to a commitment by the Australian Government to establish a disposal facility for ILW at a site different to that of the NRWMF.

RAR p.68 the CEO says the ANSTO site “continues to be safe and secure for the storage of ILW”:

ILWCI Facility Justification

The proposed ILWCI facility is part of ANSTO’s longer term contingency plans for the ongoing storage of ILW in the situation that a NRWMF facility is delayed. ...

It is agreed the Lucas Heights site is not suitable for final disposal of waste. The ANSTO Act 1987 prohibits the ANSTO site from becoming a national waste repository. However, the ANSTO site continues to be safe and secure for the temporary storage of ILW.

ANSTO Long Term Strategy

ARPANSA requires a long-term waste management strategy from ANSTO as part of ongoing regulatory oversight. The long-term waste management strategies account for delays in the establishment of a NRWMF. The latest draft document was received in January 2022.

RAR p.71 the CEO states the Lucas Heights site now has storage capacity licensed up to 2037:

Storage Capacities

Storage capacity will be increased to permit ILSW storage up to 2037 based on forecast waste generation rates.

RAR p.69 the CEO states ARPANSA does not have any info on timing for an ILW disposal facility:

Government Framework for the NRWMF

... The Australian Government has recently established the Australian Radioactive Waste Agency for the purpose of providing policy advice to the appropriate policy department ... and to prepare for seeking authorisation to establish the necessary waste facilities. ARPANSA does not have any information regarding the likely timing for establishment of a disposal facility for ILW.

RAR p.69 the CEO states ARPANSA can-not comment on the suitability of the Napandee site:

Licencing process

... It is premature for ARPANSA to comment on the suitability of the selected site at Napandee as no licence application with supporting claims arguments and evidence has been received.

... The timeline of the licence application is the responsibility of the applicant.

RAR p.72 the CEO further states ARPANSA has no role in an ARWA application for a site license:

As the independent regulator, ARPANSA has no role in the preparation of a siting licence application by ARWA including establishing timelines.

RAR p.70 on Licensing Requirements the CEO states that disposal of LL waste and storage of ILW requires separate licensing, safety cases, reviews, and assessments, with “the regulatory decision-making process potentially reaching different conclusions”:

Licensing Requirements

Due to the fundamentally different purposes, the safety case for disposal of LLW would reasonably differ significantly from the safety case for ILW disposal and require separate reviews and assessments. It is, therefore, also reasonable to consider storage and disposal at a proposed NRWMF under separate licensing in the regulatory decision-making process, potentially reaching different conclusions.

In the SOR p.21 the CEO also accepts the requirement for separate licenses and accepts that NRWMF licenses may potentially not be granted:

3.8.1 Considerations ...

Storage of ILW until disposal

Several submissions raised questions around the need for a storage facility for ILW as part of the NRWMF. The questions are summarised in italics below, followed by my response. ...

- *Q: ARPANSA should prepare for a decision that a ILW store (as part of the NRWMF) may not be licensed and that licence applications for a disposal facility for low-level waste and for storage of intermediate level waste must be separate:*

CEO's Response: Because of fundamentally different purposes, the safety case for disposal of LLW would reasonably differ significantly from the safety case for ILW disposal and require separate reviews and assessments. It is, therefore, also reasonable to consider storage and disposal at a proposed NRWMF under separate licensing in the regulatory decision-making process, potentially reaching different conclusions. ...

SOR p.71 the CEO says any decision on licensing requires ARWA as the applicant to demonstrate consideration for community well-being and community engagement along transport routes:

Stakeholder (including ARPANSA Nuclear Safety Committee) & Community Engagement

As the independent regulator, ARPANSA manages stakeholder engagement independently of the applicant and government bodies. ...

On the advice of the NSC in 2016, ARPANSA CEO made resources available for ongoing stakeholder engagement to ensure that the role of the independent regulator is communicated to stakeholders and public consultation (which includes engagement along transport routes).

However, it is important to note that as part of any decision on licencing of a NRWMF, the CEO of ARPANSA will require that the licence applicant can demonstrate they have considered community well-being throughout the proposed facility life cycle.

RAR p.70 the CEO comments on Granting and Refusing a Licence and commits to ensure contingency plans remain in place for ANSTO's ongoing safe and secure management of ILW waste at Lucas Heights:

Granting and Refusing a Licence

The ARPANSA CEO will only grant a licence to a facility if there is confidence that stringent requirements have been met including evidence of no adverse impact on human health or the environment from either facility and a clear justification for the proposed activities. ...

The review of the licence application will only commence if it is deemed reviewable, which will include an assessment of any relevant prohibitions or other actions or instruments that would prevent the lawful establishment of the facility.

The ARPANSA CEO continues to ensure that contingency plans remain in place for ANSTO's ongoing safe and secure management of ILW waste at the Lucas Heights Facility should plans for future management be altered. The latest draft of the ANSTO long term waste strategy was submitted in January 2022.