



SUBMISSION TO DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE – NATIONAL RADIOACTIVE WASTE SECTION

ON THE PROPOSAL FOR A RADIOACTIVE WASTE REPOSITORY AND STORE NEAR KIMBA, SA

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and the Australian Conservation Foundation**

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1. INTRODUCTION

This submission is in response to the federal government proposal regarding the possible establishment of a national radioactive waste facility near Kimba in South Australia. Our organisations maintain that this plan, and the related consideration of a facility in the Flinders Ranges should not be further advanced. Instead the federal government should adopt extended interim federal storage to enable a dedicated National Commission or comparable public inquiry mechanism to thoroughly investigate all options for the future management of Australia's radioactive waste.

Previous, failed attempts to establish a Commonwealth radioactive waste facility (repository and store) assumed the need for off-site, centralised facilities. This assumption continues with the current project configuration. However, a closer examination indicates both that this assumption may not be warranted and that there are major information gaps that need to be addressed before informed – and lasting – decisions should be made.

The Government should adopt a more nuanced approach which may allow it to make progress in a contested public policy area where previous Governments have failed. This approach would involve:

(i) Differentiating waste that needs to be moved vs. waste that does not need to be moved, consistent with the net-benefit clause in the Australian Radiation Protection and Nuclear Safety Act – the ARPANS Act. This in turn would require a more detailed inventory than has been compiled to date and consideration of issues (detailed in a November 2014 civil society briefing paper¹) such as the number of legacy waste sites and the adequacy/inadequacy of existing storage sites. The failure to actively address these basic issues has worked against progression to the resolution of this contentious public issue in recent decades.

(ii) Differentiating waste arising from the operations of the Australian Nuclear Science and Technology Organisation (ANSTO) from non-ANSTO waste. ANSTO is quite capable of managing its own waste, at least in the medium term.² Permanent disposal of ANSTO waste should be explored and addressed in subsequent decades, keeping in mind that ANSTO is likely to be operating at its current site for many decades to come. Importantly, the current national facility proposal at Kimba explicitly does not seek to dispose of ANSTO's most problematic radioactive wastes.

(iii) Differentiating low level radioactive wastes (LLW) from long-lived intermediate-level waste (LLILW).

Plans to move LLILW from Lucas Heights (and elsewhere) to an above-ground store co-located with the LLW repository, and then to an unspecified site at an unspecified later date, make no sense from a policy perspective and they significantly raise public-acceptance obstacles. At best, the current co-location proposal would mean double handling i.e. transport to the interim national store then future transport to a currently non-determined disposal site. Such an approach would be likely to fail a genuine net-benefit test as it would involve a net increase in public health and environmental risks.

The former Howard Government abandoned plans for co-location in 2001 and de-coupling the management approach is by no means a radical proposal. If a case for centralised interim storage of LLILW is established, secure Commonwealth sites should be considered.

2. NHMRC: NO RADIOACTIVE WASTE REPOSITORIES ON FARMING LAND

¹ Friends of the Earth, Beyond Nuclear Initiative, Australian Conservation Foundation, November 2014, 'Responsible Radioactive Waste Management in Australia: The Case For An Independent Commission Of Inquiry', www.archive.foe.org.au/sites/default/files/Responsible%20Radioactive%20Waste%20Management%20-%20The%20need%20for%20an%20Inquiry-Final.pdf

² Friends of the Earth, Beyond Nuclear Initiative, Australian Conservation Foundation, November 2014, 'Responsible Radioactive Waste Management in Australia: The Case For An Independent Commission Of Inquiry', www.archive.foe.org.au/sites/default/files/Responsible%20Radioactive%20Waste%20Management%20-%20The%20need%20for%20an%20Inquiry-Final.pdf

The National Health and Medical Research Council's (NHMRC) 1992 'Code of practice for the near-surface disposal of radioactive waste in Australia' lists the following criterion (among others) for a repository for the 'near-surface disposal of radioactive waste':

*"the site for the facility should be located in a region which has no known significant natural resources, including potentially valuable mineral deposits, and **which has little or no potential for agriculture or outdoor recreational use**"³ (emphasis added)*

The Kimba sites do not meet that criterion and should be rejected for that reason alone.

The Federal Government / Department of Industry, Innovation and Science asserts that the 1992 Code of Practice is being reviewed and revised. At the very least, consideration of the Kimba sites should be suspended until that review is completed. If the prohibition against establishing a radioactive waste repository on agricultural land is maintained in the revised Code of Practice, the Kimba sites should be rejected for that reason at this time.

It is disturbing to note that the previous Howard government breached the NHMRC's Code of Practice with shallow burial of long-lived, plutonium-contaminated waste at Maralinga. Shallow burial of long lived waste is explicitly rejected by the NHMRC's Code of Practice. Moreover, shallow burial of long-lived, plutonium-contaminated waste would not be tolerated in the USA, the UK and other countries.

Community concerns are in no way assuaged in a context where a previous federal government breached the NHMRC Code of Practice and the current government is not acting consistently with the Code. This indicates that expert advice and clear standards are subservient to political imperatives.

There is a real need to ensure consistency with the best international industry practise and standards to restore community confidence and procedural and regulatory credibility.

3. ECONOMIC AND EMPLOYMENT ISSUES

Regional employment and economic benefits have been an important driver in the promotion of and discourse surrounding the national radioactive waste facility project, however often these have been overstated. The Howard government stated that there would be zero permanent jobs at its proposed repository site near Woomera. When attention later focused on the Muckaty site in the NT, successive governments said there would be six security jobs at the site and no other permanent jobs. Work would be available when waste was transferred to the facility, but there was no expectation that it would involve locals, and waste transfers to the site were only anticipated infrequently (perhaps once every 3–5 years).⁴

³ NH&MRC, 1992, Code of practice for the near-surface disposal of radioactive waste in Australia, www.arpansa.gov.au/pubs/rhs/rhs35.pdf

⁴ The Department of Education, Science and Tourism said in 2003 that ANSTO "is unlikely to seek the holding of frequent campaigns to disposal of waste holdings generated after the initial campaign." Application to ARPANSA, 2003, Vol.iii Ch.9 Waste – Transfer and Documentation p.5.

The current Government position is that "at least 15 full-time equivalent jobs will be needed to operate the facility."⁵ It is plausible that there might be 15 jobs in the initial stage as waste holdings are transferred to the site, processed/packaged and disposed of (or stored in the case of LLILW).

However, it is implausible that 15 permanent jobs would be maintained beyond that initial phase given that waste transfers to the site would be low-volume and infrequent and it is unlikely that the facility would provide significant long-term employment and economic activity. Given that this is repeatedly advanced as a reason for support for the facility these assumptions should be clarified and tested.

4. LONG-LIVED INTERMEDIATE-LEVEL WASTE (LLILW)

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

Many stakeholders have sought clarification on the status of final disposal plans for ILW but little detail has been provided. The Department has been repeatedly asked:

Can the Department/Minister advise as to progress developing a plan for a final disposal pathway for long-lived intermediate-level waste?

Does the Department/Minister expect to have a plan in place for final disposal of long-lived intermediate-level waste by the end of the decade?

Most recently these questions were asked through the Senate Estimates process where it was evident the Government has little idea how long-lived intermediate-level waste (LLILW) will be disposed of, or when this might happen. Mr Bruce Wilson from the Department of Industry, Innovation and Science said on 1 June 2017 that "we have not commenced a process to identify a permanent disposal solution for the long-lived intermediate-level waste".⁶

Despite this the Department routinely states that LLILW stored at any national facility would be relocated in a number of decades, often citing between twenty and thirty years. This inconsistency is undermining community confidence in the national facility proposal and process.

The former National Store Committee – which considered options for disposal of LLILW – was disbanded in 2004 and the Government's current efforts towards final disposal of LLILW amount to nothing more than keeping a watching brief on developments overseas. The Department of Industry, Innovation and Science has expressed interest in deep borehole disposal of LLILW. Mr Bruce Wilson was referring to deep borehole disposal with these

⁵ <http://radioactivewaste.gov.au/jobs-and-business-opportunities/job-opportunities>

⁶ Economics Legislation Committee, Department of Industry, 1 June 2017, http://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/e3ddf88b-3e9c-4546-9d90-8f646689a98c/toc_pdf/Economics%20Legislation%20Committee_2017_06_01_5134.pdf;fileType=application%2Fpdf

comments to Parliament's Economics Legislation Committee on 1 June 2017: "The potential technological solutions for that are evolving, and there are potential other new technologies which might reduce the cost to Australia of a disposal solution – if they are proven to be effective and safe. They will be proved up over the next decade or so."⁷

However, deep borehole disposal will not be "proved up over the next decade or so."

The technology has barely reached the experimental stage overseas and there is little chance that it will provide a viable option – let alone a demonstrated, proven option – in any meaningful timeframe and certainly not over the next decade or so. In May *Associated Press* reported that the "U.S. Department of Energy is abandoning a test meant to determine whether nuclear waste can be buried far underground because of changes in budget priorities, the agency said Tuesday. A spokeswoman said in a statement that the agency doesn't intend to continue supporting the Deep Borehole Field Test project, which was meant to assess whether nuclear waste could be stored in approximately three-mile-deep holes."⁸

Mr Wilson told the Economics Legislation Committee on 1 June 2017 that "by the time we come to them [affected communities in Kimba and/or the Flinders Ranges] with a firm proposal for what this facility will look like – which will be sometime next year – we will be able to tell them, with clarity, what the options are on the intermediate level waste that might be stored there ..."⁹

However, there will be no clarity on LLILW disposal methods next year, or the year after that, or likely the year after that. All that the Federal Government and the Department of Industry, Innovation and Science will be able to say is that LLILW is destined for deep disposal under international norms – but they have no idea what that might involve, where that might happen or when it might occur - and they are making no serious effort to progress the matter.

The alternative to deep borehole disposal is deep geological disposal. There is not a single operating deep geological disposal site for spent nuclear fuel / high-level nuclear waste anywhere in the world. The one and only operating deep geological disposal site in the world – the Waste Isolation Pilot Plant (WIPP) in New Mexico, USA, for LLILW military-origin waste – was closed for three years after a chemical explosion in February 2014.

⁷ Economics Legislation Committee, Department of Industry, 1 June 2017, http://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/e3ddf88b-3e9c-4546-9d90-8f646689a98c/toc_pdf/Economics%20Legislation%20Committee_2017_06_01_5134.pdf;fileType=application%2Fpdf

⁸ Associated Press, 24 May 2017, 'Trump administration dropping nuclear waste burial test', www.nationalobserver.com/2017/05/24/news/trump-administration-dropping-nuclear-waste-burial-test

⁹ Economics Legislation Committee, Department of Industry, 1 June 2017, http://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/e3ddf88b-3e9c-4546-9d90-8f646689a98c/toc_pdf/Economics%20Legislation%20Committee_2017_06_01_5134.pdf;fileType=application%2Fpdf

As for the timelines involved, the Federal Government and the Department of Industry, Innovation and Science state that the intention is to store LLILW above-ground in the Kimba region or the Flinders Ranges for "several decades".¹⁰ Yet the regulator ARPANSA has repeatedly flagged a much longer timeline:

- ARPANSA states in its May 2017 'Information for Stakeholders' document that the proposed above-ground LLILW store (at Kimba or the Flinders Ranges) "may be operational for more than a century".¹¹
- ARPANSA states in its May 2017 'Regulatory Guide' document that the proposed above-ground LLILW store (at Kimba or the Flinders Ranges) "may be operational for more than a century".¹²
- The ARPANSA CEO said in May 2015 that: "This plan will have provision for ILW storage above ground for approximately 100 years."¹³

Clearly there is a major disconnect between what the Federal government and the Department of Industry, Innovation and Science are telling affected communities in Kimba and the Flinders Ranges and the information available in ARPANSA documentation. It is unreasonable to further advance the siting process given this fundamental lack of clarity in what is a pivotal project consideration.

Moving LLILW to an above-ground 'interim' store adjacent to a repository for lower-level wastes makes no sense given that much of the waste is currently located at ANSTO's Lucas Heights site, which is properly secured and home to much of Australia's nuclear expertise. ANSTO also enjoys considerably higher access to nuclear monitoring, security, waste management expertise and emergency response capacity than any other site in the nation.

Among other problems, the Government's current waste management strategy raises the spectre of transporting LLILW 1500+ kilometres to a store site near Kimba or in the Flinders Ranges, and potentially transporting it thousands of kilometres again from a store to a deep geological/borehole repository should such a facility be established.

The current plan for a LLILW store near Kimba or in the Flinders Ranges should not be further advanced. In 2001, the Howard Government abandoned plans for co-location of a LLILW store with a repository for lower-level wastes and this is by no means a radical proposal. If a case for centralised interim storage of LLILW is established, secure Commonwealth sites should be considered.

5. NATIONAL RADIOACTIVE WASTE MANAGEMENT ACT 2012

¹⁰ Economics Legislation Committee, Department of Industry, 1 June 2017, http://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/e3ddf88b-3e9c-4546-9d90-8f646689a98c/toc_pdf/Economics%20Legislation%20Committee_2017_06_01_5134.pdf;fileType=application%2Fpdf

¹¹ ARPANSA, May 2017, 'Information for Stakeholders', www.arpansa.gov.au/pubs/regulatory/nrwmf/Rad-waste-info-for-stakeholders.pdf

¹² ARPANSA, May 2017, 'Regulatory Guide: Applying for a licence for a radioactive waste storage or disposal facility', www.arpansa.gov.au/pubs/regulatory/guides/REG-LA-SUP-240A.pdf

¹³ ARPANSA CEO, 8 May 2015, 'Statement of Reasons', www.arpansa.gov.au/pubs/regulatory/ansto/SOR_operationIWS.pdf

The enabling legislation that underpins the federal government's approach is the National Radioactive Waste Management Act 2012 (NRWMA). Our organisations maintain that this is unnecessarily heavy-handed legislation that gives the federal government the power to extinguish rights and interests in land targeted for a radioactive waste facility. The Minister must "take into account any relevant comments by persons with a right or interest in the land" but there is no requirement to secure consent.

Traditional Owners, local communities, pastoralists, business owners, local councils and State/Territory Governments are all disadvantaged and disempowered by the NRWMA.

The NRWMA has been criticised both in Senate Inquiries and through a Federal Court challenge to an earlier federal government attempt to site a national radioactive waste facility at Muckaty in the Northern Territory.

The NRWMA also puts the federal government's radioactive waste agenda above environmental protection obligations as it seeks to curtail the application of the *Environment Protection and Biodiversity Conservation Act 1999*.

The NRWMA needs to be radically amended or replaced with legislation that protects the environment and gives local communities and Traditional Owners the right to say 'no' to nuclear waste dumps.

A detailed March 2017 paper written by Monash University fifth-year law student Amanda Ngo provides further detail on the inadequacies of the NRWMA and the need to amend or repeal and replace the legislation.¹⁴

6. SA LEGISLATION BANNING RADIOACTIVE WASTE DUMPS

South Australia – the only jurisdiction currently being considered as a potential host for a national radioactive waste facility has legislation banning the import, transport, storage and disposal of nuclear wastes – the Nuclear Waste Storage (Prohibition) Act 2000. The Act states: “The Objects of this Act are to protect the health, safety and welfare of the people of South Australia and to protect the environment in which they live by prohibiting the establishment of certain nuclear waste storage facilities in this State.”

It can only be assumed that the Federal Government's intention is to override the SA legislation just as the Howard Government tried – but failed – to do. Answers provided to a Parliamentary Question on Notice strongly indicate that the Federal Government does in fact intend to override SA legislation:¹⁵

¹⁴ Amanda Ngo, March 2017, 'National Radioactive Waste Management Act 2012', <http://tinyurl.com/nrwma-2017> or <https://d3n8a8pro7vhm.cloudfront.net/foe/pages/199/attachments/original/1489231658/NRWM A-Report-FINAL-March-2017.pdf>

¹⁵ Minister for Resources and Northern Australia, Senate, Question Number: 433. Date Asked: 29 March 2017

Question (Senator Ludlam): Is the Department considering overriding the South Australian Nuclear Waste Storage (Prohibition) Act 2000, which prohibits the import, transport, storage and disposal of irradiated nuclear fuel wastes and other wastes intended for the NRWM Facility.

Response (Senator Canavan): The department is yet to consider its position with respect to the South Australian Nuclear Waste Storage (Prohibition) Act 2000. However, the department notes that the National Radioactive Waste Management Act 2012 (NRWM Act) already provides that State and Territory laws have no effect to the extent that they "regulate, hinder or prevent" activities authorised under the NRWM Act.

The federal government has often spoken of the voluntary nature of the current national radioactive waste management project. Any failure to respect existing state legislation would deeply undermine this claim and open the process to challenge. Such an approach would also be inconsistent with international industry practice and standards that clearly highlight the importance of inclusion and consent.

There is a body of academic and policy papers that talk about the importance of community consent, the need to take time and the need to recognise and respect opposition – not to see this as vexatious or ‘emotional’

The UK Committee on Radioactive Waste Management found that “there is a growing recognition that it is not ethically acceptable for a society to impose a radioactive waste facility on an unwilling community”. The European Union Nuclear Decommissioning Best Practice guidelines state that experience “has shown that without this consent, the project will sooner or later be cancelled, stopped or indefinitely delayed – one way or the other”.

Further the UN Declaration on the Rights of Indigenous Peoples (Article 29) outlines that "States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent”.

The federal government should clearly and publicly state whether it intends to ignore, override or respect existing state legislation. Communities in the affected regions of Kimba and the Flinders Ranges should be clearly informed about the federal government’s intent.

7. INDEPENDENT ASSESSMENT AND INQUIRY

The case for a dedicated National Commission or comparable public inquiry mechanism to thoroughly investigate all options for managing Australia's radioactive waste, and a discussion on how that Commission might be constituted and the issues it might address, is detailed in a November 2014 paper by the organisations making this submission along with the Beyond Nuclear Initiative.¹⁶ This paper is currently being revised and will be supplied to

¹⁶ Friends of the Earth, Beyond Nuclear Initiative, Australian Conservation Foundation, November 2014, 'Responsible Radioactive Waste Management in Australia: The Case for An Independent Commission Of Inquiry', www.archive.foe.org.au/sites/default/files/Responsible%20Radioactive%20Waste%20Management%20-%20The%20need%20for%20an%20Inquiry-Final.pdf

the Minister, the Department of Industry, Innovation and Science, stakeholders and affected communities to help explore options to resolve the policy hiatus around this issue.

An important, preliminary task needed to advance responsible radioactive waste management is to establish an accurate and up-to-date inventory of Australia's radioactive waste stockpiles. That must include consideration of the nature and adequacy/inadequacy of current storage conditions, and the nature and adequacy/inadequacy of institutional control.

Serious consideration of those issues is necessary if informed decisions about future waste management options are to be made, yet successive Governments have largely ignored these issues. For example, the Department of Industry, Innovation and Science's recent public newsletter (Issue No. 8, April 2017) states that "existing stores" for radioactive wastes "are nearing capacity at more than 100 sites across the country". The Department has been repeatedly asked to provide evidence to justify that assertion, however no detailed response has been forthcoming.

The existence of untested or unclear project assumptions and clear information deficiencies deeply undermines stakeholder confidence in the project and the wider government approach to radioactive waste management.

Net-benefit principles are enshrined in the NH&MRC Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia¹⁷ and in subsection 32(3) of the ARPANS Act.¹⁸ Yet successive federal governments have made no effort to attempt to demonstrate a net benefit with their radioactive waste repository and LLILW store proposals.

Successive governments have assumed that a shallow, remote repository is the best solution for low-level radioactive waste (LLW). That assumption needs to be tested as no federal government has attempted to demonstrate the net benefit of a remote repository. Measured by radioactivity, a large majority of LLW is stored at ANSTO's Lucas Heights site; measured by volume, ANSTO manages about half the total volume. ANSTO expects to continue to operate at the Lucas Heights site for many decades into the future and it is by no means clear that a remote repository is preferable to ongoing storage at Lucas Heights, especially given the continuing uncertainty around the long-term future management options for LLILW.

It may be the case that ongoing storage at Lucas Heights is a preferable medium-term option for the following reasons:

- Australia's nuclear expertise is heavily concentrated at Lucas Heights;
- storage at Lucas Heights would negate risks associated with transportation over thousands of kilometres (moreover if LLW waste is moved out of Lucas Heights some decades into the future, it would be considerably less hazardous due to radioactive decay in the interim);
- security at Lucas Heights is far more rigorous than any proposed for a remote repository

¹⁷ www.arpansa.gov.au/pubs/rhs/rhs35.pdf

¹⁸ www.comlaw.gov.au/Series/F1999B00034

- this approach would require producers of radioactive waste management to take increased responsibility for their own waste – a practise consistent with accepted waste minimisation principles.

Relevant government organisations (and others) have acknowledged that ongoing radioactive waste storage at Lucas Heights is a viable option:

- Dr Ron Cameron, ANSTO, when asked if ANSTO could continue to manage its own waste: "ANSTO is capable of handling and storing wastes for long periods of time. There is no difficulty with that. I think we've been doing it for many years. We have the capability and technology to do so."¹⁹
- Andrew Humpherson, ANSTO: "Lucas Heights is a 70-hectare campus with something like 80 buildings. It's a large area. We've got quite a number of buildings there which house radioactive materials. They're all stored safely and securely and all surrounded by a high-security perimeter fence with Federal Police guarding. It is the most secure facility we have got in Australia."²⁰
- Dr Clarence Hardy, Australian Nuclear Association: "It would be entirely feasible to keep storing it [radioactive waste] at Lucas Heights ..."²¹
- Then ARPANSA CEO John Loy: "Should it come about that the national approach to a waste repository not proceed, it will be necessary for the Commonwealth to devise an approach to final disposal of LLW from Lucas Heights, including LLW generated by operation of the RRR [Replacement Research Reactor]. In the meantime, this waste will have to be continued to be handled properly on the Lucas Heights site. I am satisfied, on the basis of my assessment of the present waste management plan, including the license and conditions applying to the waste operations on site, that it can be."²²
- Department of Education, Science and Tourism: "A significant factor is that ANSTO has the capacity to safely store considerable volumes of waste at Lucas Heights and is unlikely to seek the holding of frequent campaigns to disposal of waste holdings generated after the initial campaign."²³

There have been sustained information deficiencies and errors and a lack of clarity regarding existing waste stores. Claims have repeatedly been made that waste stores are inadequate (e.g. hospital car-parks, filing cabinets and basements) to justify remote repository projects. One document released under Freedom of Information states that "none" of the waste "is stored satisfactorily" in existing stores. Yet then industry minister Ian Macfarlane said in September 2014 that current waste stores are "very, very safe".²⁴

¹⁹ ARPANSA forum, Adelaide, 26 February 2004, <http://web.archive.org/web/20040610143043/http://www.arpansa.gov.au/reposit/nrwr.htm#forum>

²⁰ September 2008, www.abc.net.au/news/2008-09-22/new-nuclear-waste-site-for-sydney/517372

²¹ ARPANSA forum, Adelaide, 26 February 2004, <http://web.archive.org/web/20040610143043/http://www.arpansa.gov.au/reposit/nrwr.htm#forum>

²² April 2002, Decision by the CEO of ARPANSA on Application to construct the Replacement Research Reactor at Lucas Heights. Reasons for Decision", p.30.

²³ Application to ARPANSA, 2003, Vol.iii Ch.9 Waste – Transfer and Documentation p.5.

²⁴ www.sbs.com.au/news/article/2014/09/30/government-searching-nuclear-waste-site-time-runs-out

Likewise, a document released by Senator Nick Minchin, one of the Howard Government ministers responsible for radioactive waste management, stated: "The safety of the storage of radioactive waste is proven by the fact that there are fifty stores around Australia housing radioactive waste and there has never been an accident exposing a person to unsafe levels of radiation."

It is important to note that even while arguing that existing waste stores are inadequate, successive federal governments have shown no interest whatsoever in upgrading waste stores – including those that will continue storing waste even if an off-site disposal or storage option becomes available. The recent confirmation of a loss of storage integrity among drums of CSIRO low-level waste at the Woomera facility in South Australia highlights the consequences of such inattention. If a portion of the political and departmental effort that has gone into two decades of a search for a site had been applied to effective containment of existing wastes this would not have occurred. The fact that it has happened is unacceptable and has eroded community confidence as well as containers.

8. CONCLUSION

The federal government should not further advance the proposal to establish a radioactive waste facility near Kimba along with the related consideration of a site in the Flinders Ranges. Instead the government should adopt extended interim storage, particularly of LLILW at ANSTO, and adopt a circuit-breaker in this stalled and contested policy arena through a National Commission or comparable public inquiry mechanism to investigate all options for advancing responsible future management of Australia's radioactive waste.