

Senate Standing Committee on Economics
PO Box 6100
Parliament House
Canberra ACT 2600

September 2022

To the Senate Standing Committees on Economics,

Re: Atomic Energy Amendment (Mine Rehabilitation and Closure) Bill 2022.

On behalf of the Mineral Policy Institute (MPI), we would like to pay our respects to the Mirrar people, whose lands we are discussing in this submission, and thank them for their sustained efforts to protect this internationally significant Kakadu area which we treasure.

It is clear that there was no possible way for the proponents of the Ranger uranium mine to meet the closure criteria within the legislated timeframe outlined in the Atomic Energy Act and so we welcome the amendment bill to address this significant barrier to achieving the best possible rehabilitation of Ranger.

MPI are eager to take this opportunity to discuss some of the broader risks and issues, noting that the mandated time frame is not the only barrier to achieving the successful rehabilitation of Ranger. Attached is a report jointly written by the Mineral Policy Institute, Australian Conservation Foundation, Environment Centre NT and the University of Sydney – Sydney Environment Institute, which reviewed the Mine Closure Plan for the Ranger uranium mine. The report is enclosed for your review and for more detailed discussion on each of these issues.

In summary we found that the following barriers to rehabilitation exist:

- information and data deficiencies and continuing technical uncertainties
- persistent technical challenges relating to groundwater and tailings management
- a lack of remediation planning and the unexplained de-prioritisation of rehabilitating the large and long-lived radioactive tailings plume beneath the site
- a proposal to leave the floor of the tailings dam in situ, risking contaminants entering Kakadu
- inadequate contingency planning and a lack of consideration of climate change impacts and scenarios
- an absence of social impact analysis and engagement
- a lack of clarity around the post-closure regulatory framework and the oversight and accountability needed to ensure compliance with the RMCP and closure criteria
- uncertainty over the adequacy of current and future financing – especially in relation to post-closure site monitoring and mitigation works
- lack of clarity on the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) World Heritage Committee standards for incorporation of the remediated Ranger site into Kakadu National Park

- a lack of transparency around the status and process for assessing the separate stand-alone applications for significant aspects of the rehabilitation work.

Importantly for this review and in consideration of the legislative and governing frameworks we raised the following concerns:

- The regulatory landscape governing Ranger is complex, often unclear and difficult to navigate
- Role ambiguity and overlap between the Commonwealth and NT governments – where there is ambiguity we are concerned there will be a growing sense of self regulation by the proponent where there needs to be really clear roles and responsibilities and requirements to get the best possible outcome that is enduring
- The Atomic Energy Act does not include environmental regulation, enforcement, monitoring or offence provisions
- The Supervising Scientist Branch (SSB) does not have regulatory powers but instead acts in an advisory role and is reliant on funding from the proponent – with the significant Key Knowledge Needs (KKNs = gaps in knowledge that effect the rehabilitation of Ranger) the SSB has a greater role and needs greater resourcing to help address those KKNs.
- The Commonwealth needs to have the legal capacity to enforce compliance with the Mine Closure Plan and closure criteria – and they need to have a clear role in setting/ approving / amending the Mine Closure Plan and closure criteria and that should be open to stakeholder input.

On these issues the report includes the following recommendations.

- That the Commonwealth clearly establish and articulate a closure and post-closure governance and regulatory framework that establishes a program of post-closure monitoring and maintenance, clearly articulates the processes for approval of closure requirements and criteria, and sets out requirements for seeking third-party approvals from future land users.
- That closure funding and financial securities held through the Ranger Trust Fund be clearly presented along with the arrangements and framework for securing funds for any post-closure works.
- That the Commonwealth engage with UNESCO's World Heritage Committee and its expert advisory bodies on establishing criteria for the potential inclusion of Ranger into the dual World Heritage listed Kakadu National Park.
- That there be improved transparency, including through the release of studies and agreements related to stand-alone project applications. In particular we seek the public release of the INTERA groundwater modelling studies and detail on the TSF subfloor material management approval.

We note that there are provisions in the amendment Bill that give the Minister power to apply Environmental Requirements for the rehabilitation of Ranger and prevents any ongoing mining. This provides some improved clarity around the Commonwealths responsibilities. We hope to see the Commonwealth engage much more rigorously on establishing and facilitating a clear process for setting:

- legally enforceable closure criteria based on outcomes (not simply meeting design parameters)
- UNESCO requirements
- financial arrangements and post closure monitoring and management requirements

We would also be glad for further clarity on the penalties for failure to comply with conditions, restrictions, requirements and a guidance document on the regulatory roles and responsibilities of the NT government, Commonwealth government and the SSB.

The history of uranium mine closure in Australia has demonstrated that post closure issues can and do emerge, long after the relinquishment of sites. Once relinquished we understand that Ranger would likely become the responsibility of the Commonwealth. There is a need for greater clarity between the Commonwealth and Northern Territory government around post-closure arrangements, monitoring, maintenance and relinquishment and the ongoing role and funding for the SSB. There is currently a loose commitment in the mine closure plan that there will be an allocation of \$20 million over 25 years for post closure monitoring and maintenance. This is not a clear regulatory requirement without any clear provisions for the remediation in case of failure and the arbitrary monetary figure and time period are dangerously deficient. In any conditions that the Minister may apply to a Rehabilitation Authority we strongly advocate that there be post closure conditions included.

Some questions we have about post closure arrangements include:

- What laws – Commonwealth or Northern Territory – apply if contamination occurs off-site including via seepage into ground and surface water?
- What if any legislated requirements are there for post closure monitoring – who will regulate those requirements?
- How will the Commonwealth determine the post closure monitoring timeframe
- What are the conditions for the return of the bond?
- How will the Ranger Trust Fund operate in perpetuity?

Our concluding recommendations from the review of the Mine Closure Plan were:

- That the Commonwealth fund an independent regional process to assess, monitor and manage the impacts of closure on Aboriginal people in the region and realise a just transition to a post-mining Alligator Rivers Region. This would be informed by and undertaken in close collaboration with Mirarr people and other neighbouring Traditional Owner groups whose country is regulated under the same arrangements.
- That future RMCPs address the data from Social Impact Assessments and translate it into meaningful, transparent commitments, including to work with and fund Mirarr and other neighbouring Traditional Owner groups whose country is regulated under the same arrangements in the transition to a post-mining regional economy.
- That social impact management and monitoring be a post-closure requirement of equivalent standing to other forms of biophysical management and monitoring.
- That there be improved transparency and stakeholder engagement in setting closure criteria and closure planning.
- That the Jacobs SIA and all future ERA-sponsored SIA material be made public.

- That addressing deficiencies in the KKNs, particularly those relating to contaminants be prioritised
- That following the extension of the mandated timeline for the Ranger rehabilitation project key issues including the deconstruction of the Tailings Storage Facility, the decision to leave the tailings floor in situ be revisited. The public – and particularly key stakeholders such as GAC – must be given access to decision making processes on critical design aspects of the tailing’s rehabilitation.
- That contingency plans address a range of future climate scenarios, including those developed through the SSB, and that these findings be incorporated into future RMCPs and address isolating tailings from the environment for at least 10,000 years.
- That consideration and formal advance of the closure criteria be deferred until the deficiencies in the KKNs have been addressed and there is clear evidence and a complete contaminant transport model. Closure criteria should also undergo a separate process with clear engagement and agreement with future land users, particularly GAC.
- That the ALARA principle be replaced with As Low as Technically Achievable (ALATA) in future RMCPs and that the definition of Best Practicable Technology be defined consistently with that of the Fox Inquiry. This recommended that “all required rehabilitative work and all measures required for the continuing protection of the environment be carried out by the operator at its expense” and that “the best practicable technology (developed anywhere, which can be applied to the uranium industry in Australia) to prevent environmental pollution and degradation be adopted.”
- That ERA/Rio Tinto comply with advice to develop detailed contingency plans and that these be made publicly available.
- That the Commonwealth clearly establish and articulate a closure and post-closure governance and regulatory framework that establishes a program of post-closure monitoring and maintenance, clearly articulates the processes for approval of closure requirements and criteria, and sets out requirements for seeking third-party approvals from future land users.
- That closure funding and financial securities held through the Ranger Trust Fund be clearly presented along with the arrangements and framework for securing funds for any post-closure works.
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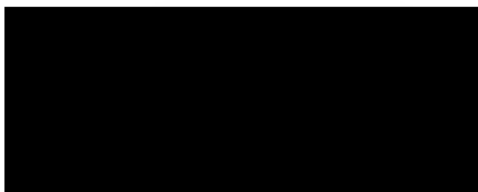
In addition to these comments and recommendations we would also like to take this opportunity to advocate for an inquiry into the wider uranium sector. With the momentous closure of the controversial and contested Ranger uranium mine - uranium mining in Australia is now confined to one state - SA. There is one proposed uranium mine in WA, if it went ahead would be the first new uranium mine in Australia in a decade and the first ever for the state of WA. There has never been a better time for a review of the sector.

The closure of Ranger has clear environmental issues, a complex regulatory framework and significant costs. This is an important time to reflect on the costs and benefits of the uranium sector. The last time there was a federal inquiry into uranium mining was 2003 – nearly 20 years ago. In that time a lot has happened:

- Australian uranium sales to nuclear weapons states has expanded to India and China and for a short period - Russia
- Australian uranium was sold to TEPCO and was inside reactors at Fukushima when they went into meltdown on the 11th of March 2011
- Australian uranium was sold to Ukraine in 2021 – whose civilian reactors were subsequently occupied by a foreign invading army in war in 2022
- There have been numerous leaks, spills, accidents, fires etc at Australian uranium mines
- There is still no existing permanent nuclear waste storage facility globally to manage the increasing volume of nuclear waste – a direct by product of Australian uranium in the nuclear fuel cycle and there is of course a growing number of nuclear weapons which relies of waste from nuclear reactors
- We have had the national dose register in place in Australia for over a decade which provides and unique source of data on the health impacts and outcomes for radiation workers
- With the closure of Ranger we now also know the total income generated from exploiting the uranium deposit at Ranger and we have a clearer estimate of the rehabilitation costs – providing a unique opportunity to conduct a cost benefit analysis of uranium mining – with a focus on the environmental and social costs – as recommended by former UN Secretary General Ban Ki Moon following the Fukushima nuclear disaster.

Thankyou for the opportunity to input into the Atomic Energy Amendment Bill, we are eager to see the Bill pass and we look forward to an increasing engagement for the Commonwealth in defining a rigorous and transparent process and framework to ensure the Ranger uranium mine rehabilitation is successful and enduring. We also hope very much that the Commonwealth will actively consider and conduct an inquiry into uranium mining in Australia and we would welcome the opportunity to engage in developing the terms of reference for such an inquiry.

Regards,



Mia Pepper
Deputy Chair
Mineral Policy Institute

