



# Submission to the Productivity Commission in response to the Draft Report on Resource Sector Regulation.

Submitted by the Mineral Policy Institute.

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## 1. Introduction

We welcome the Productivity Commissions draft report on Resource Sector Regulations (the Report) and the opportunity for comment. The Mineral Policy Institute has a strong interest in community engagement, project assessments, mining legacies and uranium mining. This submission is focussed on these critical areas of interest. In the Introduction we consider key international trends on resource sector policy aimed at delivering a greater share of benefits to host communities and countries. We also discuss key findings and recommendations from the UN regarding COVID recovery as it relates to the resource sector. This submission is then made in four sections addressing our key areas of interest in resource sector regulation - communities, assessments, mining legacies and uranium mining. A summary of recommendations includes:

### *Community*

- Free Prior and Informed Consent should be practiced as should guidance within the United Nations Declaration on the Rights of Indigenous Peoples.
- Greater local procurement requirements
- Limiting the use of FIFO workers
- Greater funding for Prescribed Body Corporates to fulfil their role effectively and address limitations in capacity and makes PBCs reliant on funding from mining
- Develop statutory responsibility for private agents to represent native title holders interests as a whole group
- Retain Non-assessable/ Non-exempt taxation system for native title funds outside the structure of “charities”
- Aboriginal Heritage reform which prevents the removal and destruction of Aboriginal heritage by mining companies and includes the assessment of water bodies as cultural heritage sites.

### *Assessments*

- Establish a National Environmental Protection Authority (EPA) and or a National Environmental Commission to separate political influence and improve transparency and independence to promote evidence-based decision making
- Increase third party appeal rights to include merits review of decisions and project approvals.
- Require culturally informed social impact assessments that assess all components of individual and community well-being affected directly and indirectly by any mining project<sup>1</sup>.

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<sup>1</sup> Yap, M. (2017). In pursuit of culturally relevant indicators of Indigenous wellbeing: Operationalising the Recognition space. *ANU Thesis, Canberra*.

## *Mine Closure*

- Ensure all environmental and financial regulatory mechanisms that authorise and govern mining activity are based on a polluter pays principle and safeguard Australian communities from future social, financial and environmental liabilities.
- Implement a national legal obligation for closure liability accounting and reporting on a site-by-site basis, to be included in annual financial statements and as a separate line item in company balance sheets.
- Require mining proposals to clearly identify and be assessed on closure costs and post mine management requirements over the life of the site (including perpetual management) and identify a secure funding mechanism relevant to management timeframes.
- Remove the perceived 'right to mine'. Apply full social, cultural and economic impact assessment over the life of the mine, including psychological costs of landscape disturbance.
- Encourage and facilitate greater jurisdictional coordination. Adopt Australian minimum standards: (a) post-closure assessment and reporting, (b) greater transparency and independent assessment of mining proposals and (c) environmental financial instruments (these financial instruments should preclude levies without bonds such as the system in place in WA)
- Legislate for and implement national annual reporting on the impacts of mine closure. This must include the financial liability from both mining legacies and post-mine management.
- Define and regulate care and maintenance to prevent companies from holding sites in care and maintenance indefinitely
- Increase powers to assess capacity and capabilities of companies to meet environmental requirement and mine closure requirements. These powers should be increased where there is a change in the controlling interest of the company for the government to assess the parties seeking controlling interest, to limit the nefarious sale of mines to small companies unable to meet requirements.

## *Uranium*

- that uranium mining remains within the definition of 'nuclear action' and that nuclear actions continue to be listed as 'matters of national environmental significance' (MNES) and the protected matters continue to be listed as the 'environment' and so be subject to full environmental assessment
- the DAWE to initiate an inquiry into the human and environmental impacts of uranium mining, as advised by the UN Secretary General following the Fukushima nuclear disaster, noting that Australian uranium was present in each of the reactors at Fukushima Daiichi at the time of multiple reactor meltdowns.
- the federal and state governments instigate rehabilitation of abandoned uranium mines, processing facilities and mines and exploration sites that have been in care and maintenance for more than two years.

## 1.1 Global Trends in Resource Sector Regulation

The United Nations International Resource Panel (UN IRP) have expressed in the “building resilient societies after the Covid 19 Pandemic” that “we must shift to a new paradigm of resource use that is socially equitable, economically resilient, and environmentally healthy. IRP research proves that it is possible and provides potential paths to follow<sup>2</sup>.” They advocate for smarter extraction – reducing the depletion of natural resources, green stimulus, energy and water efficiency and phasing out of fossil fuels.

The UN IRP identify the impacts of the resource sector and its unsustainable growth since the 1970s. They found that in 2017 the extraction of metals and non-metallic minerals accounted for 20% of climate change impacts, 20% of particulate matter health impacts, 4% of water stress and 2% of land use related biodiversity loss. They note that as ore grades decline these impacts are likely to increase. The UN IRP advocate for high level systems changes we commend this to the Commission for consideration<sup>3</sup>.

Regulatory certainty is critical going forward and this should reflect a range of interests, at the forefront of those interests should be our environment which sustains all else and our communities. The remit of this review to find efficiencies and attract investment places an unhealthy importance on the resource sectors contributions to the Australian economy, and risks undermining our environmental and social values. Our economy needs greater diversity and our resources should be properly valued without compromise to the environment and communities.

The premise that we need to move regulatory goal posts to address a threat of losing investment is unfounded, as clearly detailed in Finding 2.1 of the Report “the potential for investment will likely remain substantial” because Australia has significant and diverse resources. We are often presented with the notion that Australia is competing internationally to attract foreign investment as a case for deregulation. The reality is that international companies want Australian resources. Many resource rich countries are taking a new approach to regulations described as ‘resource nationalism’ - a regulatory trend which demands a greater benefit for communities from resource extraction. Resource nationalist policies globally have included local content requirements for labour, power and materials<sup>4,5,6</sup> higher environmental standards<sup>7</sup>, restrictions on corporate structures to ensure a percentage of ownership is held by government or local companies<sup>8</sup>, the reclamation of private land<sup>9</sup>,

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2 United Nations International Resource Panel (2020) Building Resilient Societies After the Covid-19 Pandemic. <https://www.resourcepanel.org/reports/building-resilient-societies-after-covid-19-pandemic>

3 Ibid

4 Ernst and Young (2018) Business risks facing mining and metals 2017-2018. Accessed online 27/07/2018 <https://www.ey.com/gl/en/industries/mining---metals/business-risks-in-mining-and-metals> &

5 Macatangay, R.E (2016). Optimal local content requirement policies for extractive industries. Resources Policy 50 (2016) 244-252.

6 Munson, C.L; Rosenblatt, M.J. (1997) The Impact of Local Content Rules on Global Sourcing Decisions. Production and Operations Management. Vol. 6, No. 3, Fall 19997 - USA

7 Broad, R; Fischer-Mackey, J (2017) From extractivism towards buen vivir : mining policy as an indicator of a new development paradigm prioritising the environment, Third World Quarterly, 38:6, 1327-1349, DOI: 10.1080/01436597.2016.1262741; & Ernst and Young (2018)

8 Wilson, J.D. (2015) Understanding resource nationalism: economic dynamics and political institutions, Contemporary Politics, 21:4, 399-416, DOI: 10.1080/13569775.2015.1013293

9 Ibid

changes to tax to increase the public share of profits<sup>10</sup>. We encourage the Productivity Commission to consider this trend when contemplating international competition and to preference demanding a greater share of benefit from resource extraction and stricter regulations to minimise environmental impact rather than lowering the regulatory bar.

We also encourage the Commission to consider the UN IRP report and policy recommendations for minerals and metals extraction which include: concession agreements, domesticating natural capital accounting, incorporating social and environmental assessments, ensuring transparency and accountability, channelling extractive rents into national and local public investment, agreeing to international standards, regulating financial markets and promoting end-of-life recycling for metals.

We welcome findings from the Commission that acknowledge the pressure the mining sector has on Australia's biodiversity and the absence of transparency. Findings about mine closure are welcome as is the acknowledgement of the legacies of the mining sector. We are encouraged by the Commissions understanding of the behaviour of some companies to avoid mine closure responsibilities and we appreciate the cautionary note that levies remove important incentives for mine closure. Sentiments about the misuse of care and maintenance and alternatively the value in progressive rehabilitation are also welcome.

Issues around benefit sharing and engagement and rights for communities are complex. The absence of long-term benefits for communities and traditional owners is stark. Bans, moratoria and veto rights are something we strongly advocate for as is demanding a greater share of benefit for host communities during the operation of mining and planning to support local businesses transition to a post mining economy. We discuss broad issues with Native Title, Land Rights and heritage protection legislation that has largely failed to deliver lasting and meaningful benefit for Native Title holders or Aboriginal communities in affected areas but instead has been coercive and divisive leaving behind social scars which are amplified by loss of access to country and the removal and destruction of cultural sites.

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<sup>10</sup> Ernst and Young (2018) Business risks facing mining and metals 2017-2018. Accessed online 27/07/2018 <https://www.ey.com/gl/en/industries/mining---metals/business-risks-in-mining-and-metals> & Wilson, J.D. (2015)

## 2. Community

There are three basic mechanisms by which mining affected communities may get a return from money taken out of the region where there are no substantial jobs or local procurement for the community. Communities may enter into native title agreements in exchange for a land access rent, they may be able to get access to government spending in those communities, or the company may fund community programs as part of their Corporate Social Responsibility commitments. Most of these benefits are delivered in the form of charity or grants which undermines the ability to grow wealth and has a lasting impact on the mentality of NT holders and broader community towards mining and an absence of long-term wealth creation.

We address topics under the following headings: distribution of costs and benefits, Native Title Rights – Free Prior and Informed Consent, Employment – Fly In Fly Out, Local Procurement, Capacity of Prescribed Body Corporates, Charities and Economic Development and Aboriginal Heritage.

### 2.1 Distribution of costs and benefits

While the PC have outlined a view that there is no inherent need to channel royalties or government spending into mining affected communities, we suggest that there is in fact a genuine need and moral obligation for a greater flow of funds to mining affected communities, particularly indigenous communities who are disproportionately affected by mining, as acknowledged by the Minerals Council of Australia<sup>11</sup>. A much greater percentage of royalties and tax revenue from the mining industry should be distributed where there is the greatest need to address the ‘closing the gap’ priority areas of – child mortality, early childhood education, school attendance, literacy and numeracy, year 12 attainment, employment and life expectancy and the diverse health issues that encompasses.

In the conversation through the PC review on benefit sharing we strongly urge the Commission to review their findings on the need and responsibility of the mining sector and the government to facilitate the commensurate flow of government spending back into the most disadvantaged communities in Australia who are disproportionately affected by mining.

Programs like Royalties for Regions in WA were designed to assist mining affected communities by directing the flow of money back into communities. The WA experience was that the funding available through royalties for regions was largely intercepted and directed back into the mining industry to fund exploration drilling or to parts of the regional community who are more affluent. Funds were largely seen as being used for political pork barrelling by the Nationals party rather than delivering positive outcomes for communities who are most in need.

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<sup>11</sup> Mundine, N.W; Henderson, E (2017) Crafting the future, Minerals industry engagement with Indigenous Australia. Minerals Council of Australia.  
<https://minerals.org.au/sites/default/files/Minerals%20industry%20engagement%20with%20Indigenous%20Australia%20October%202017%20FINAL.pdf>

For example, in 2015 the WA Auditor General identified that drinking water in regional and remote areas of WA often fail to meet Australian drinking water standards and yet this critical health issue was not addressed through programs like Royalties for regions,<sup>12</sup> in fact it hasn't been addressed at all. In another example Aboriginal community members travelling to regional centres for medical treatment, often dialysis or waiting for a transplant, in Kalgoorlie, Port Headland, Karratha were often found to be camping in the scrub on the outskirts of town – unable to get any other accommodation. This experience is not unique to WA but seen in Katherine<sup>13</sup> and Alice Springs<sup>14</sup> in the NT. There is a very clear need for financial support, infrastructure and services in communities affected by mining. The stark economic and social divide in Australia's mining communities would suggest that in fact there is an inherent need to bridge that divide through channelling royalties and funds to mining affected communities where it is most needed.

These are just two examples where there is a significant and urgent need to provide appropriate and basic infrastructure which would have direct health benefits for regional and remote communities where the allocation of royalties funding or government funding should be made available but is not. These are among a whole suite of issues presented in closing the gap reports addressing suicide, education, employment, health. Where there is a gap in government providing basic services there is often an expectation that a mining company can fill that gap. This is problematic because corporations' companies may provide basic infrastructure but not the ongoing funding to make that infrastructure usable. For example there are many dialysis machines throughout the regions in WA but they are not operational because there is no funding for the nurses to operate the machines, often water quality is too low to operate the machines or the machines need to run during the evening because the water is too hot to operate during the day.

First nations communities experience the extraction of wealth from their regions and communities with wealth transferred to private companies and government with little or no return to the local population. These communities are some of the countries most disadvantaged and suffer some of the greatest health impacts. Through consultation with communities it's our view that Governments are avoiding their responsibilities happy to take tax wealth from mining companies, but they don't distribute this back to the communities on a commensurate level. This equates to a colonial economic model which places further negative impacts on already marginalised communities. We advocate for an economic model based on equality which is not about distributing funds equally; equality is about distributing resources to where there is the greatest need. This is how we achieve more equal health, education and employment outcomes.

Disruption and loss often manifest itself in severe forms of disadvantage that aboriginal people suffer. Including economic loss that translates in-to economic disadvantage, cultural loss that translates into emotional social and psychological and spiritual harm and a multitude of instances of disadvantages documented by closing the gap indicators. Most of

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<sup>12</sup> Office of the Auditor General WA (2015) Delivering Essential Services to Remote Aboriginal Communities

<sup>13</sup> Wood, L; Quilty, S; (2019) How a Rethink of Emergency Care is Closing the Gap One Person at a Time. The Conversation December 20<sup>th</sup> 2019

<sup>14</sup> Davidson, H (2015) Dialysis Patient Forced to Sleep Rough in Alice Springs as Funding cuts Bite. The Guardian February 23<sup>rd</sup> 2015



the development projects do not undertake a social cultural economic and environmental impact study into the benefits of these projects. Without that kind of data you cannot hypothecate the impacts of potential royalty distribution in regional communities<sup>1516</sup>.

Considering native title or other forms of tenure that have property rights, where mining projects come in and disrupt those rights there should be compensation for loss. Compensation for loss is not a royalty, it is a replacement of value that has been lost or damaged, it is important to note that some loss and damage cannot be repaid or compensated. Compensation should be assured as well as greater returns to communities through royalties and government funding to provide services and ensure access to health, education, clean water and healthy food.

It is very important that local Aboriginal communities and traditional owners have an opportunity to take rental payments in the form of land access payments and are compensated in full for the consequences of these activities that result in disruption and loss.

## 2.2 Native Title Rights – Free Prior and Informed Consent

There needs to be a distinction between a landowner and community member. Land - owners, including Native Title (NT) holders, hold a legitimate stake in the process and any proposal to water down the legal rights of native title property holders may contravene the constitution. Responsibility of delivering social economic outcomes to the broader community of Aboriginal and non-Aboriginal people is fundamentally the role of state and federal governments who benefit from revenue extracted from these regions subject to free prior and informed consent. The operation of the NT Act and the assumption of development approvals processes does not translate to free participation<sup>17</sup> in delivering consent. Freedom should entail that you have the freedom to participate or not. Where NT holders do not choose to participate there is no protection against mining, in fact mining overrides NT – this design of the NT Act means that negotiations are coerced with the threat the mining will take place and no compensation given or benefits delivered.

The NT Act is built on the assumption that the act will be done subject to conditions or may not be done. In 25 years of administration there have been limited circumstance in which development were not done as a result of participating in the NT framework. The presumption that Aboriginal groups participation is free is wrong. Calling for a veto is based on the perception that participation is coerced. Information is not culturally delivered and consent is built on promises of benefit sharing in the form of jobs/ economic participation and rent taking in the form of payments and the promise of compensation for loss and disadvantage as a result of development. FPIC doesn't amount to a veto – but in fact it is

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<sup>15</sup> Albrecht, G., Sartore, G.-M., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., . . . Pollard, G. (2007). Solastalgia: The Distress Caused by Environmental Change. *Australasian Psychiatry*, 15(1 suppl), S95-S98. doi:10.1080/10398560701701288

<sup>16</sup> Norgaard, K. M., & Reed, R. (2017). Emotional impacts of environmental decline: What can Native cosmologies teach sociology about emotions and environmental justice? *Theory and Society*, 46(6), 463-495. doi:10.1007/s11186-017-9302-6

<sup>17</sup> Joly, T. L., Longley, H., Wells, C., & Gerbrandt, J. (2018). Ethnographic refusal in traditional land use mapping: Consultation, impact assessment, and sovereignty in the Athabasca oil sands region. *The Extractive Industries and Society*, 5(2), 335-343. doi:10.1016/j.exis.2018.03.002

coerced participation with false promises negotiated through Indigenous Land Use Agreements (ILUA). Paying rent for land access is a normal transaction, paying compensation for loss or disadvantage is a normal process. What is not normal is contractually preventing people from using their legal rights to voice opposition, participate in environmental assessment or object to the destruction of Aboriginal heritage. In our collective experience ILUAs' often include such clauses that seek to prevent NT holders from exercising their democratic rights to freedom of speech and participating in appeals processes or legal objections.

There is limited federal government investment in the capacity of Prescribed Body Corporates. Their existence often relies on negotiating mining deals and ILUAs to fund the running of the PBC with little delivery of meaningful programs or allocating funds for education and health or advancing other economic ambitions within the community. Without government investment in addressing closing the gap indicators of native title groups the concept of FPIC is meaningless. People will sign agreements where they think they will get some advantage to address issues which could be taken care of by proper investment or delivery of services by government.

The United Nations Declaration on the Rights of Indigenous People includes Part 4 – Self Determination and Free Prior and Informed Consent may be considered a best practice approach to consultation. The standard outlined in the UNDRIP articles 10, 11, 19, 28, 29 & 32 on Free Prior and Informed Consent are not well understood or have been deeply misinterpreted in the context of negotiating mine agreements through the NT Act.

There are countless examples of where mining companies have chosen individuals to negotiate with, outside of formal processes established by representative bodies, in an attempt to manufacture consent among some individuals rather than a group. This serves the company by either dividing the group or bullying a group to consent. This type of behaviour is not consistent with the idea of free consent because it involves pressure, force and can lead to bullying. It is not part of an open, honest or transparent process and does not respect group decision making processes.

Part of what is so problematic about the way companies engage with individuals in communities is that there are no repercussions for actively seeking to divide a community and no protections for community members against unsolicited approaches from companies. Like with many regulations for the mining sector the success or failure for communities and the environment tends to rely on very savvy and engaged community members who know their rights, understand processes and are willing to speak out often in situations where there are significant power imbalances and intimidation and often at a great personal cost.

The recent revelations about the destruction of the Juukan Gorge heritage sites by Rio Tinto exposed a fairly standard practice across the mining sector in which companies negotiate ILUAs which have clauses that prevent people from using their legal rights to object to aspects of a project. These clauses may be about specific legal rights – for example commenting on or opposing permits to remove or destroy artefacts or they may be about objections on environmental aspects of a project. Clauses also may seek to prevent

communities from voicing opposition<sup>18</sup> to a project either during the sale of a project or during the operation of a project. ILUAs are frequently kept confidential, even to signatories of an agreement after it has been signed.

Objections to projects are part of a healthy democracy. There are rights to object and appeal rights enshrined in law that mining companies are actively trying to deny community members from using. This practice is abhorrent, and communities are often in vulnerable positions not always fully understanding the consequence of agreeing to terms and conditions, or where these conditions are explained in detail the threat that the company would not be forthcoming in making the agreement and therefore the threat that there would not be royalties or payments acts as a bribe. Representative bodies do not always represent the interests of the community, bullying, intimidation, and withholding information are all too common. Reform in this area is critical to resolving and reducing conflict in communities over mining negotiations and to meet our obligations under international treaties.

Guidelines around consultation in Australia should be developed in line with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) principles of Free Prior and Informed Consent, including:

- prohibit companies from seeking to prevent Aboriginal communities from using legal and democratic rights afforded to them under various pieces of legislation.
- Enforce standards around negotiating with groups and not individuals and penalties for non-compliance or misconduct in consultations
- Indigenous communities need to be included in the design of social impact terms of reference and the processes need to be adequately resourced to capture the impacts and the aspirations.

Social impact<sup>19</sup> is now frequently assessed in projects that require environmental assessment, but there are no guidelines, legislation or regulator that enforces any standards around social impact making social impact a little bit academic. Companies respond to social impact issues often by funding community projects or including some local procurement options which is seen as securing their 'social license to operate' or as part of their corporate social responsibility. This is usually in the form of charity or funding sporting events but does not necessarily address the social impacts created by the mining development. The measurement of impact is problematic, setting outcomes and regulating social impact does not exist in current structures or policy. In WA in the 1980's and 1990 there was the Social Impact Unit which was linked to the EPA perhaps lessons could be learned from how that operated. Concepts around social license and social responsibility are all industry guidelines which rely on self-reporting. There is little recourse for communities to get improved outcomes on social impact.

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<sup>18</sup> Griffith Law School (2020) A Cultural Heritage Stitch Up in WA. Law Futures Centre <https://news.griffith.edu.au/2020/06/15/a-cultural-heritage-stitch-up-in-wa/>

<sup>19</sup> Joyce, S. J., Sairinen, R. A., & Vanclay, F. G. (2018). Using social impact assessment to achieve better outcomes for communities and mining companies. In Mining and Sustainable Development (Vol. 65, pp. 65-86): ROUTLEDGE in association with GSE Research.

## 2.3 Employment / Fly In Fly Out (FIFO)

Mining companies need to assemble a skilled and capable work force to undertake the mining activity and 95% of the time this workforce is not resident in the local communities. The capital that is invested in wages results in wealth transference back to where the workers are from. The mining industry FIFO workforce have a mercenary like presence who make no significant economic contribution to local economy. Money earned at a remote mine sites does not flow through to the local economy but is extracted and invested in communities far removed from the mine site. There are significant economic imbalances in communities where there are FIFO workers.

FIFO workforce reduces the amount of cash circulating in the local economy and therefore Where there is FIFO and employment programs for local residents once those local people are employed and engaged in the company workforce they may choose to relocate to a metropolitan area and fly in and fly out, again taking that wealth and benefits of that employment out of the local community. FIFO is not good for local communities.

## 2.4 Local Procurement

Indigenous procurement policy at a state and federal level has led to marked improvements for indigenous people. This is a fundamental policy initiative that goes a long way to addressing socio economic disadvantage and helps bridge the gap. The flow on impacts of local procurement and particularly Indigenous procurement means that local business gain opportunities to supply goods and services thereby creating a greater return of the spend into local communities. Local procurement in addition to the development of economic planning for post mining economies would be a better practice. Regional sovereign wealth fund takes a share of resources extracted and reinvested into future proofing their economies into post mining circumstances.

The Minerals Council of Australia released a report in 2017 titled “industry engagement with Indigenous Australia in which one of their key recommendations is a local procurement recommendation “Create demand for locally supplied goods and services by buying local and actively sourcing supplies from local businesses to service mining projects and mining camps.”<sup>20</sup>

Where local communities or governments can develop infrastructure to scale based on demand of use by mining companies and as the owner and operator of that infrastructure the economic benefits will go back into those local communities. With sound economic management they can then manage the future requirements of the infrastructure and its impacts on their local communities. Taking the profits and reinvesting in the community could support local companies, reduce exposure for capital investment in new projects. Examples of this include the airports in Kalgoorlie, Karratha, Port Hedland. Consideration should be given to regional councils and cities investing in solar and wind for mining that can

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<sup>20</sup> Mundine, N.W; Henderson, E (2017) Crafting the future, Minerals industry engagement with Indigenous Australia. Minerals Council of Australia.  
[https://minerals.org.au/sites/default/files/Minerals%20industry%20engagement%20with%20Indigenous%20Australia\\_October%202017\\_FINAL.pdf](https://minerals.org.au/sites/default/files/Minerals%20industry%20engagement%20with%20Indigenous%20Australia_October%202017_FINAL.pdf) see recommendation 3, page 6.

be repurposed for other industry post mining, an example of project of this kind is the Agnew solar and wind project, or where renewable energy project by mining companies are given to communities post mine closure as an asset for those communities to repurpose for new industries or energy security for towns.

## 2.5 Capacity of Prescribed Body Corporates

Funding arrangements are not adequate for Prescribed Body Corporates (PBC). They have statutory functions to perform and limited funding impacts on their ability to adequately perform those functions. PBCs often operate in remote areas and have responsibility over many thousands of square kilometres. Current funding to bring together native title holders from dispersed areas is limited. Regular meetings with native title holders are needed for those meetings to be effective, greater funding is required to make those meetings possible.

As mentioned earlier, the absence of funding for PBCs often has the adverse impact of making those poorly funded PBCs more reliant on mining and funding from mining to keep operating. Sometimes this ambition to maintain a functioning PBC is pushed by the staff of the PBC and can impact how information is presented the NT holders and inadvertently or directly push NT holders towards making a decision which may be at odds with the true intent or ambition of the NT group.

We agree that statutory obligations should be placed on private agents. Those agents must be held responsible to the native title holders as a group. There is a personal relationship between the solicitor and the client. In NT practice it is the group through the applicants who instruct the solicitor and the obligation is to the group. It is critical that agents are acting under the instruction and for the benefit of the NT holders as a group, not individual interests within the group. There are instances where private agents may be awarded a 'signing fee' for getting a positive outcome for a private company – not necessarily a positive outcome that represents the will of the NT group. These types of financial incentives for private agents can translate into financial incentives for individual members of a NT group. This type of practice is disingenuous and creates conflict that is lasting in communities. Private agents should have statutory obligations to address this issue and force better representation of the NT group.

## 2.6 Charities and Economic Independence

The issues of NT funds and the interaction with charity status has two significant implications for NT holders and PBCs. The first is NT holders in effect are charity recipients as opposed to being empowered to grow their wealth, this has a psychological impact and a real impact on the long-term economic independence of NT holders. The second is the prevention of NT holders using NT lands for commercial enterprise. These two elements of NT disempower NT holders from economic independence and growing their collective wealth.

Currently money is paid into a charitable trust, it is then dispersed for the purpose of charitable outcomes or beneficial outcomes. NT holders are rich with this wealth but the way that money is used or handled keep NT holders in poverty – using those funds to provide

charity and treating NT holders as charity recipients, rather than empowering communities to make economic decisions that could grow that wealth, this is a flawed structure.

The issues that exist around compliance could be dealt with through guidelines and training, but the bigger issue is that Aboriginal groups should be empowered to grow their wealth. Putting money into charities creates a perpetual culture of welfare dependence and disempowerment. The long-term wealth creation through being able to invest and grow wealth is critical to getting long term outcomes for NT holders.

According to the Australian Taxation Office “native title benefits are now considered non-assessable non-exempt (NANE) income and are therefore not subject to income tax (however, income earned from investing a native title benefit is assessable as income)” (ATO) Payments of NT benefits to charities is a relic from before the 2015 amendments. The ultimate goal is to have NT money supporting wealth creation and intergenerational wealth within the protection of NA NE framework which will allow NT beneficiaries to close the economic gap, the economic marginalisation, as a result of benefiting from NT payments. NA / NE does not affect non-indigenous charitable trusts. NT money should not be in charitable sector it should be in the NA/NE supporting economic and cultural opportunities for NT holders and beneficiaries.

One thing that could happen is the federal government could streamline funding through the Indigenous Land Corporation and Indigenous Business Australia for native title enterprises. There is not enough support at these organisations, as a result finance is not deployed effectively to support the development of NT enterprises. There needs to be a greater focus on individual and family groups accessing native title money for economic purposes and development, including purchasing property, and or developing enterprise opportunities. For consolidation of native title funding focused on the development of family and individual intergenerational wealth.

## 2.7 Aboriginal Heritage

The PC report asked the question whether “interactions on indigenous heritage and the resource sector be improved.” The answer to the question put by the Productivity Commission on is very simple. Aboriginal Heritage needs legislative protections equal to built heritage. The permitting of the destruction and removal of Aboriginal Heritage is vandalism and equates to cultural genocide. This practice and the laws that allow the destruction and removal of Aboriginal heritage must be amended. National leadership on this is required to ensure that all the States and Territories create legal protections for Aboriginal Heritage. Mining, agriculture, any industrial activity should not override the protection of Aboriginal heritage.

It is important to note that water, including rivers, underground water, aquifers and basins, lakes, springs and water holes, ephemeral rivers and creeks all make up a fundamental linkage to cultural and spiritual values in Aboriginal communities. The use of water resources in industry and mining need to be aware of the cultural and spiritual implications from

interfering in those systems. These should be assessed and there should be mechanisms to include Aboriginal input<sup>21</sup> into decision making on water resources.

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<sup>21</sup> Aledo-Tur, A., & Dominguez-Gomez, J. A. (2017). Social Impact Assessment (SIA) from a multidimensional paradigmatic perspective: Challenges and opportunities. *J Environ Manage*, 195(Pt 1), 56-61. doi:10.1016/j.jenvman.2016.10.060

### 3. Project assessment

We remain concerned about the front end of mine assessments which set the groundwork for responsible operation and requirements for mine closure. We continue to hear rhetoric from the mining industry lobby that there is a need to 'cut green tape' often overstating the threat of losing investment and jobs.

The industry presents an idea that consultation is done poorly and leads to delays. These are two different issues and should not be conflated. The time for consultation is not a delay it is part of proper process, and while we agree it is done poorly, often too late and often tokenistic, resolving those issues should be dealt with separately from this idea of streamlining/ cutting green tape/ or getting assessment done quicker.

Delays in assessment processes often reflect that proponents of new projects have not met or understood guidelines in the preparation of baseline environmental studies and the government requires more information. This type of delay is essential in generating the best possible information and is critical to benchmarking the pre mining environment with which to measure future impact. No government should be pressured to approve a project based on a superficial timeline when they do not have adequate information to make a sound decision. Industry need to reflect on what they can do to reduce the timelines by providing the best quality and compliant information, demonstrating a commitment to operating responsibly.

It is critical that proponents understand their obligations and requirements and how to follow guidelines and regulations from the earliest stage. Improvements in how those guidelines and requirements are communicated may be the root cause of the problem. Equally proponents may have a knowledge gap in policy which is the industries responsibility to fill. Lobby groups such as the MCA would do a great service to their industry in providing workshops and skills and understanding about existing policy rather than expending a majority of its time lobbying for deregulation.

If it's the productivity commissions finding that there is a human resources capacity issue with the assessment of projects perhaps there should be an increase in application fees for projects which could enable the hiring of more staff to work through assessments. If the problem is industry's frustrations around timelines for assessments it is important that they are the forefront of becoming the solution, without attacking due process and reducing regulations and safeguards.

We strongly support calls from other environmental groups for the need for independent environmental assessments and the establishment of a national Environmental Protection Authority. We also support the establishment of a land and environment court for merits review of decisions. While we note industry supporters have raised concerns about 'lawfare', the reality is that, under existing laws, in most jurisdictions, the only mechanisms for review of decisions are based on administrative errors. In most jurisdictions there are no appeal rights to consider whether the level of environmental impact is acceptable or not or whether the approval conditions are sufficient to mitigate the risks. If we are serious about



environmental protection there should be third party appeal rights to questions whether a project approval will lead to unacceptable environmental harm.

There are two case studies below that reflect on deficiencies in the assessment of mines demonstrating the need for third party appeal rights for merits review of decisions. In particular the Yeelirrie case study clearly reflects on the failures of state and national laws for environmental protection and the limitations of the courts to defend the objectives of our environmental laws. The Yeelirrie case study also identifies the inappropriate level of political influence in decision making and demonstrates the need for independent, transparent, and evidenced based decision making free from political interference. In reading the case study on Yeelirrie please consider its implications for project assessments more broadly.

## 4. Mining Legacies

We welcome the commission’s findings that bonds and progressive rehabilitation are the best available regulatory tools (Draft best practice - 7.7; 7.8; 7.10) towards delivering mine closure and the realisation that levies (such as the one introduced in Western Australia) removes the financial incentive to rehabilitate. Having identified the best practice regulation it is important to understand that to date these mechanisms, which are not completely new, have largely failed to deliver.

In Australia there are over 50,000 abandoned mines,<sup>22</sup> between 400 – 2977 operating mines, between 206 – 972+ mines in Care & Maintenance (C&M) and only around 30 mines that are closed or undergoing closure (see table 1).<sup>23</sup> The huge disparity between the number of closed or closing mines and all other stages of mining demonstrates a significant failure of the industry to deliver on closure commitments and a greater policy failure to ensure companies are held to account on closure requirements.

The reality is that most mine closures are unplanned<sup>24</sup>, mines are vulnerable to economic and market factors and closure often comes at an expense to the environment and eventually the government<sup>25</sup>. The ambition of this government to reduce incentives and costs for mining companies presents very real practical problems about removing entry barriers for companies that may simply not be able to withstand market volatility<sup>26</sup>. Please see Appendix 1 “Ground Truths: Taking responsibility for Australia’s Mining Legacies” report by the Mineral Policy Institute for a more detailed look at Mining Legacy issues in Australia using cases studies at a number of coal mines and an example of a lead zinc mine and a uranium mines.

As identified in the Productivity Commission report there is a trend of larger companies selling unprofitable mines to smaller companies who do not have the financial or technical capabilities to restart or close. Smaller companies tend to place mines in care and maintenance – with limited capacity to restart or close. More details about possible regulatory options to address ‘onselling’ are described below.

Existing regulatory approaches for mines that are struggling financially can exacerbate the risk of companies defaulting a factor which can lead to complacency and inaction among regulators<sup>27</sup>. This reality may prevent regulators from taking action and becoming complacent about problematic sites. This dynamic results in mines staying in perpetual care and maintenance as a pseudo abandoned mine. We outline this problem to suggest that many of the mines listed as being in care and maintenance should more appropriately be

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<sup>22</sup> Unger, C.J; Lechner, A.M; Glenn, V; Edraki, M; Mulligan, D.R. (2012) Mapping and Prioritising Rehabilitation of Abandoned Mines in Australia. Life-of-Mine Conference 2012

<sup>23</sup> Campbell, R; Linqvist, J; Browne, B; Swann, T; Grudnoff, M (2017) Dark side of the boom. What we do and don't know about mines, closures and rehabilitation. The Australia Institute. April 2017.

<sup>24</sup> Laurence, D. (2006). Optimisation of the mine closure process. *Journal of Cleaner Production*, 14(3-4), 285-298. doi:10.1016/j.jclepro.2004.04.011

<sup>25</sup> Roche, C; Judd (2016) Ground Truths: Taking Responsibility for Australia's Mining Legacies. The Mineral Policy Institute. ISBN: 978-0-9946216-0-3v

<sup>26</sup> Pepper, M (2020) Care and Maintenance, A loophole or lifeline? The Policy and Practice of Mines in Care and Maintenance in Australia. Master Thesis – Murdoch University (unpublished).

<sup>27</sup> Ibid

classed as abandoned or as a legacy site and to demonstrate that existing regulatory fixes are limited.

The importance of financial uncertainty is exacerbated by any reduction in regulation. We note that in response to the COVID 19 pandemic there have been significant changes to commodities markets and there is a significant push by industry to reduce regulation to establish new mines and keep mines open - citing jobs and revenue. There is no doubt Australia will suffer economic impacts as a result of COVID 19 and that the mining sector will continue to play a role in our economy. What we must not lose sight of is the long term environmental and social consequences the mining sector has and therefore needs strong regulation. We must not compromise our expectations on environmental protection, occupational health and safety and social impacts from the mining sector.

*Table 1: Mines in care and maintenance (C&M), operating, undergoing closure, closed, & abandoned - Australia wide (adapted from Table 1 & 2 “Dark Side of the Boom<sup>28</sup>”).*

Jurisdiction	C&M	operating	closure	closed	abandoned
NSW	NA -123	85 -109	1 +	1 +	112 -410
NT	4 +	6 - 7	unknown	0 +	unknow
Qld	19 -129	147 - 1,207	0 +	0 +	unknown – 15,000
SA	8 -151	9 - 783	1 +	18 +	681 – 3,255
Tas	9	15	4 - 11	1 - 6	unknown -4,200
Vic	122	47 - 162	2 +	1 +	25 – 19,010
WA	44 - 438	151 - 661	unknown	unknown	9,870 – 17,000
<b>Australia</b>	<b>206 - 972 +</b>	<b>460 – 2,944</b>	<b>8 +</b>	<b>22 +</b>	<b>unknown – 58,875</b>

Table 1 identifies the significant gap between mine closure and all other stages of mining. It also indicates that nationally there is a significant number of mines in care and maintenance which are at a greater risk of abandonment and warrants serious regulatory attention. The large variation in low and high estimates of numbers for each stage of mining also indicates that there is an issue in reporting and capturing information about mines and mines stages. As suggested by Campbell et al this can, in part, be attributed to a variation between jurisdictions in the way they report or define stages of mining.

Table 2 below is an adaptation of the Commonwealth’s Leading Practice Sustainable Development Program for the Mining Industry - Mine Rehabilitation September 2016. The table differentiates between planned and unplanned stages of mining. It also includes care and maintenance as a stage of mining and unplanned pre closure (in addition to planned pre closure as a stage within the operating phase). This revised table adds greater clarity about some of the more unplanned and problematic stages of mining.

<sup>28</sup> Roche, C; Judd (2016) Ground Truths: Taking Responsibility for Australia's Mining Legacies. The Mineral Policy Institute. ISBN: 978-0-9946216-0-3v

Table 2. Mine Stages (adapted from Commonwealth of Australia 2016<sup>29</sup> & interviews)<sup>30</sup>

Mine Stages	Description key activities
Exploration	Remote sensing, drilling, community consultation, base line environmental data collection, land clearing for tracks and drill pads, water management, waste management.
Feasibility	Feasibility study considering all environmental, social and economic aspects of mining including mine closure.
Planning and design	Consideration of all options for mining with thought to environment, social and economic aspects, community consultation (*a critical phase for planning landforms and structures that will support mining and need closure).
Construction and commissioning	A phase of intensive activity and employment to connect water, power, fuel and chemicals, construct crushing plants, processing facilities, waste rock storage, tailings storage, stockpile areas, accommodation, workshops, offices and roads and community consultation.
Operations	Operations commissioning stage – stripping for open pits/ development of declines/ shafts, developing waste rock landforms and Tailings Storage Facilities (TSF) mature operations stage – steady operations and production <b>mine feature care and maintenance (planned and unplanned)</b> – where an individual mine feature e.g. tailings, mine pit, underground shaft etc. temporarily ceases operations but the rest of the mine continues to operate <b>pre-closure (planned)</b> planning stage – refining closure criteria/ community consultation. <b>progressive rehabilitation (planned)</b> – rehabilitation of areas that are no longer required for the operation of the mine.
Care and Maintenance	Where mining at a whole mine, or mine feature, has temporarily stopped and the holder *(company or administrator) is responsible for compliance with ongoing monitoring, maintenance, reporting, fees and progressive rehabilitation requirements with the view to recommence mining.
Pre-Closure	Working with the community and government to develop a set of agreed mine closure criteria and preparing to decommission and close a mine. A mine in pre-closure may have prematurely ceased operations without the necessary mine closure plans, these mines are not C&M because there is no intention to re-commence mining.
Abandonment	Where there is no staffing or activity on site and no holder with which responsibility for the site can be assigned and government assumes responsibility. Once a mine is abandoned the government may either; secure the site and look for potential buyers to recommence mining; commence mine closure; or leave the site abandoned until funding becomes available to close. (*note there are 50,000+ abandoned mines across Australia).
Decommissioning and closure	Implementing closure plans, removing infrastructure, decommissioning tailings, reshaping landforms like waste rock landforms, re-establishing surface hydrology, treatment and disposal of waste-water, rehabilitation and remediation, monitoring, community consultation. This should include progressive rehabilitation throughout the LOM.
Post closure - management and monitoring	Ongoing monitoring and management for any post closure problems, remedial works until relinquishment of the site is approved by government.

### Care and Maintenance:

Importantly there has been increased awareness of issues relating to care and maintenance and companies using care and maintenance to avoid mine closure. With the exception of WA there is no jurisdiction that defines what care and maintenance is – although every jurisdiction uses the term. While we welcome acknowledgment of this problem in the

<sup>29</sup> Commonwealth of Australia 2016. MINE CLOSURE Leading Practice Sustainable Development Program for the Mining Industry - Mine Rehabilitation September 2016

<sup>30</sup> Pepper, M (2020) Care and Maintenance, A loophole or lifeline? The Policy and Practice of Mines in Care and Maintenance in Australia. Master Thesis – Murdoch University (unpublished).

Productivity Commission report the recommendation that this risk can be managed through notifying regulators and developing care and maintenance plans is a good start but far from a solution.

In the first instance we recommend that the following definition be adopted by state, territory and commonwealth government - an adaptation of definitions by the Commonwealth and WA Governments: “Care and maintenance is a stage of mining, where mining operations have temporarily ceased, where there are ongoing requirements to manage the site and infrastructure and meet environmental obligations, with the demonstrated intention to recommence mining within a negotiated time frame and where a company, group or individual, other than government, retains responsibility for the site.”

The definition above outlines that requirements still apply with a focus on infrastructure which remains a key indicator about the financial prospects of recommencement. The definition is explicit about the expectation the mine will recommence and that there be an onus to demonstrate that intent and the capabilities to do so. It also allows for a time restriction on care and maintenance and makes a distinction about ownership and responsibility of the site. There are a number of sites around Australia listed as being in care and maintenance where there is in fact no owner and so these mines should be classed as abandoned.

Below is a table outlining some regulatory options that are used in different jurisdictions it describes their potential impact and limitations.

*Table 3. Regulatory options, when they might be applied & their potential impacts.)<sup>31</sup>*

Regulatory Options (tools)	When this action may be required	Potential Impact of action
Notification (Interviewees; B1, B4, B7, B8, B10, B11 & B12)	When a mine enters C&M.	- Gives government options to initiate a set of regulatory tools
Forcing Closure/ Rehabilitation (Interviewees; B2, B3, B7 & B9)	When the remaining resource at a C&M site is small and the company has no prospects of recommencing mining. This may happen by either cancelling licenses, or not extending approvals for operation plans. This is generally a last resort and may be triggered by a consistent failure of the company to comply with conditions.	- Rehabilitation and closure - Liquidation and abandonment
Progressive Rehabilitation (Interviewees; A1, B2, B3, B4, B5, B7, B10 & B12)	At any mine throughout the LOM.	- Improved understanding of site-specific rehabilitation challenges - Reduce overall closure costs - Better closure and rehabilitation outcomes - Reduces overall liability for company and government

<sup>31</sup> Pepper, M (2020) Care and Maintenance, A loophole or lifeline? The Policy and Practice of Mines in Care and Maintenance in Australia. Master Thesis – Murdoch University (unpublished).

<p>Cancelling licenses, leases, tenements (Interviewees; B2, B7, B9 &amp; B11)</p>	<p>Where a company is non-compliant with meeting the conditions on a C&amp;M mine and where there is no foreseeable prospects of recommencing mining and the company is not amenable to selling the site.</p>	<ul style="list-style-type: none"> <li>- Allows government to access bonds and or sell the mine</li> </ul>
<p>Time restrictions / Reviewing 'mine plans'<sup>32</sup> (Interviewees; B3, B9 &amp; B7)</p>	<p>Putting a mine in C&amp;M may trigger the requirement for a revised mine plan this may be approved for a limited time e.g. 2 years. The government has powers to cancel approvals based on the time rather than non-compliance – i.e. when the approval expires the government can either renew the approval or not.</p>	<ul style="list-style-type: none"> <li>- Allows the government to review a mine plan and make new conditions.</li> <li>- More leverage to encourage a company to sell the asset</li> <li>- Lead to the company pursuing an approved closure plan and or commencing an already approved closure plan</li> <li>- cause a company to go into administration and or liquidation and the site to be sold or abandoned</li> </ul>
<p>Requiring a C&amp;M Plan (Interviewees; A1, A3, B3, B7, B8, B9 &amp; B10)</p>	<p>A C&amp;M plan may be required during the approvals stage of mining, as part of an operational plan or a mine closure plan, or within a certain time frame of entering C&amp;M e.g. within 3 months.</p>	<ul style="list-style-type: none"> <li>- Set a comprehensive plan that incorporates a range of regulatory requirements from a range of regulators</li> <li>- Clearly identify a pathway out of C&amp;M</li> <li>- Set a time limit of C&amp;M</li> </ul>
<p>Amending Conditions (Interviewees; A4, B1, B3, B8, B9, B11 &amp; B12)</p>	<p>Where a site in C&amp;M has different, either reduced or increased, risks that require new conditions to best manage those risks.</p>	<ul style="list-style-type: none"> <li>- Reduced or increased, monitoring and reporting requirements.</li> <li>- Possible financial relief</li> </ul>
<p>Coercing / facilitating the sale of C&amp;M sites (Interviewees; B1, B4, B7, B9, B10 &amp; B12)</p>	<p>When there is a remaining mineable resource at a C&amp;M site but where the existing company does not have the capacity to recommence mining or is in administration.</p>	<ul style="list-style-type: none"> <li>- Lead to a new owner recommencing mining</li> <li>- Lead to a new owner but may continue in C&amp;M</li> <li>- Lead to a new owner who then tries to sell</li> <li>- Lead to a new owner who goes into administration and or liquidation</li> </ul>
<p>Increasing bonds (Interviewees; A1, A2, A3, A4, B1, B2, B3, B4, B5, B6, B7, B8, B9, B10 &amp; B11)</p>	<p>When a mine in C&amp;M is reviewed and the bonds are found to not be commensurate with the expected cost of closure.</p>	<ul style="list-style-type: none"> <li>- Can lead to a company going into administration and or liquidation<sup>33</sup></li> <li>- May result in a more appropriate bond being held</li> </ul>

<sup>32</sup> The term 'mine plan' is used in general to describe an approved plan for mining and or mine closure – there are different names for these plans in each jurisdiction.

<sup>33</sup> Many interviewees discussed the importance of bonds being regularly reviewed and adjusted so that they are commensurate with the actual cost of a third party undertaking the full closure and rehabilitation as outlined in an approved closure plan.

Definition <sup>34</sup> (Interviewees; A1, A3, A4, B9 & B12)	Becomes relevant when a company claims to be in C&M.	- Establishes parameters around the use of the terminology and what policies apply
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*On selling/ Disclaiming:*

The Productivity Commission report acknowledges the problematic behaviour of companies selling mines in care and maintenance or uneconomic mines to smaller companies who don't have the technical or financial capabilities to either restart or rehabilitate. The Queensland Government identified that companies may set up subsidiaries for an individual mine project making divestment easier - there are less regulatory hurdles for a company to sell a whole company than it is to sell a mine project. The Queensland Government has done some thinking on regulatory approaches to address the selling of uneconomic projects to smaller companies and have put forward an idea for consideration.

The Queensland discussion paper<sup>35</sup> floats the idea of having greater powers to assess any change in controlling interest of a company, so as to restrict the ability of companies passing on mining liabilities to companies who do not have the capacity to meet environmental conditions or mine closure requirements. We strongly support this approach of increasing government powers to assess the financial and technical capabilities and capacity of companies to meet environmental and closure requirements both during assessment of mine projects and through any change in controlling interests of a mine project or revision of mine plans.

The Queensland discussion paper also raised the issue of companies disclaiming and the existing definitions in the Corporations Act 2001 which have the impact of terminating liabilities (including mine closure requirements) when a company has disclaimed and is under liquidation. The Queensland government identifies that restoring the mine closure liabilities is lengthy and costly. The West Australian Minister for Mines has made a suggestion that the environment be given creditor status under the Corporations Act. While this may come at the expense of other creditors and protections should be put in place for workers, it is the kind of approach we need to change the behaviour of companies and take mine closure responsibilities seriously.

*“To avoid these rehabilitation costs falling to the State the Commonwealth Corporations Act 2001 needs to be changed to make the environment a creditor in the circumstance of insolvency or bankruptcy. These changes would complement the West Australian Government’s comprehensive legislation, standards and obligations for the planning and implementation of mine closure and rehabilitation.”<sup>36</sup> Minister for Mines Industry Regulation and Safety, WA.*

Regulatory options for addressing the avoidance of mine closure need to address the corporate activities which allow companies to evade their closure and environmental

<sup>34</sup> A definition is not necessarily a policy tool but is an important aspect of applying policy tools.

<sup>35</sup> Achieving improved rehabilitation for Queensland: other associated risks and proposed solutions 2018

<sup>36</sup> WA (2017) Questions On Notice No. 85. Legislative Council 27th June 2017. Parliament 40. Session <https://www.parliament.wa.gov.au/parliament/pquest.nsf/969994fcf861850d4825718d002fe7fb/07966410f92925914825814c001ae83d?OpenDocument&Click=>

responsibilities. Consideration of ways to track executives of companies which have disclaimed and then move on to establish new companies is also critical in an effective regulatory system to prevent mine closure avoidance. These approaches also need to increase governments ability to assess and have influence over changes in controlling interests of companies to avoid the nefarious sale of uneconomic and problematic mines to companies who cannot meet environmental and closure requirements.



## 5. Uranium Trigger

This section argues against changes being proposed by nuclear industry advocates to the definition of ‘nuclear actions’ in the Environmental Protection and Biodiversity Conservation Act 1999 (the EPBC Act). It considers recent inquiries into uranium mining and proposes areas of reform to improve environmental outcomes, including a prohibition on uranium mining. It presents case studies which identify deficiencies within the approval processes and where there has been a failure to deliver on the principles and objects of the EPBC Act.

In subdivision E, section 22(1)(d) of the EPBC Act the “mining and milling of uranium ore” is listed as a ‘nuclear action’ which is a MNES. Within the recent EPBC Review discussion paper there is a suggestion that MNES have changed over time and there is a specific suggestion that ‘nuclear actions’ be removed from the list of MNES<sup>37</sup>. This view is being prosecuted by some stakeholders, most notably the Minerals Council of Australia, despite no change or reduction in the risk of nuclear actions. Uranium, and the radioactive wastes and by products remain a significant human health and environmental risk. There is still no example of a successfully rehabilitated uranium mine site and ongoing pollution issues continue and emerge at operating mine sites (see Table below).

The Productivity Commission draft report into resource sector regulation suggests a review of the nuclear actions trigger in the EPBC Act. They suggest that the EPBC Act assessment of nuclear actions “deliver few, if any, benefits to the community, but adds significant costs.”<sup>38</sup> This analysis should be a catalyst for improving regulations and oversight rather than a driver to further remove federal scrutiny. The Productivity Commission’s perspective of scant benefit may also be attributed to the establishment of poorly weighted bilateral agreements between the Commonwealth and states/territories, which have diminished the role of the Department of Agriculture, Water and Environment (DAWE) in the assessment process.

The Productivity Commission’s comments on the uranium trigger raise the issue of the costs of administering the uranium trigger. Greater detail on these costs would be of interest. An analysis of these costs, in conjunction with details on the long-term cost to the environment, with consideration to rehabilitation and post closure monitoring and maintenance, should be weighed against the overall benefit of the industry. This review would be a valuable process, particularly if it includes a meaningful investigation of the industry’s overall impacts. Such investigations have been called for through the UN Secretary General, following the Fukushima Disaster, for all uranium producing countries.

The issue of the ‘uranium trigger’ capturing other minerals with radioactive materials, such as rare earths and mineral sands should not be used as a reason to remove the trigger but requires greater consideration of the impacts of mining rare earths and mineral sands. The impact of this legislative requirement on mineral sands and rare earths does not negate the risks of uranium mining. The radiological impact of this is not insignificant. As discussed later in the section the idea of normalising uranium or downplaying the risks has a very real occupational health and safety outcome. From a regulatory perspective, ARPANSA may have

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<sup>37</sup> EPBC Review Discussion paper pg 15

<sup>38</sup> Productivity Commission 2020. Draft Report - Resources Sector Regulation. Pg 16. March 2020

carriage over addressing radiological matters but there is no public process for reviewing or commenting on the assessment of those matters. Where there are radiation issues there is likely to be a higher level of public interest. Transparency and engagement on the assessment is crucial, there is neither through ARPANSA processes.

The whole of environment assessment for mines classed as a ‘nuclear action’ is critical to understand and assess the pathways for radiological material into the environment, through dust, groundwater, surface water, waste rock, tailings and mining. The uptake and risks to flora and fauna, community and workers are all critical considerations in any assessment of a project that has radiological material. The issue is not so much duplication but a lack of coordination among regulators. This is not a legitimate reason to reduce regulation, oversight, transparency and public engagement on the assessment of ‘nuclear actions’.

There is a misconception that over time regulations and standards have improved and in turn the risk of uranium mines has somehow diminished. This is simply not the case and there is evidence that existing regulations fall short of addressing the risks of uranium mining. Further, there are continuing concerns that the lack of scrutiny, studies and scientific evidence remains a significant knowledge gap in the management of uranium mine sites. The section below “Regulating Uranium – Inquiries” gives greater detail about the outcome of inquiries and recommendations for improved regulations which identifies significant issues with the risks associated with uranium mining and its regulation.

Under existing assessment bilateral agreements, the Commonwealth has deferred the assessment of ‘controlled actions’ to the states and territories. The federal government, however, is still required to ‘approve’ controlled actions. Within this process there is an important mechanism for the federal government to apply conditions as part of an ‘approval’ to ensure consistency with the objects and principles of the EPBC Act 1999. This ability should not be compromised or reduced.

The bilateral agreements, which were designed to stop a perceived duplication of process, have not delivered good environmental assessment practice in relation to Australia’s uranium sector. The sections below titled “Roxby Downs Indenture Act Case Study” and “Yeelirrie Case Study” highlight failures in the bilateral process to account for complex state legislation that overrides or de-prioritises other environment legislation along with a failure to uphold the objects and principles of the EPBC Act.

These examples demonstrate the constraints and limitations of some state processes and the need for meaningful federal oversight. One option to address this deficiency would be to establish a National Environmental Protection Authority (EPA) and or a National Environmental Commission. Another is to ensure that the uranium sector remains an active focus of federal attention through the nation’s primary environmental law framework, the EPBC Act. This oversight and ability to apply conditions is particularly important for uranium mining where there is a disparity between state and federal requirements for radiation safety (see section Nuclear Power – Legislative Implications).<sup>39</sup>

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<sup>39</sup> Commonwealth Inquiry Submission 136 - ARPANSA pg. 3

It is essential that uranium mining remain within the definition of ‘nuclear actions’ and that nuclear actions remain listed as a MNES and that full environmental assessments under the EPBC Act are retained. While this process still falls short of effectively regulating the industry and has not and cannot be assured to deliver positive environmental outcomes, it’s removal would profoundly weaken an already deficient regulatory framework for the sector which has both high risks and high rates of incidents. Australia’s uranium sector is contested, flat-lining and characterised by under-performance and non-compliance – this is not the time for the Commonwealth to be walking away from dedicated scrutiny or reducing environmental protections.

In this section we call for:

- the prohibition of uranium mining in the EPBC Act on the basis that the nuclear industry has failed to successfully remediate any uranium mine in Australia and has impacts inconsistent with the objects and principles of the EPBC Act.
- the DAWE to initiate an inquiry into the human and environmental impacts of uranium mining, as advised by the UN Secretary General following the Fukushima nuclear disaster, noting that Australian uranium was present in each of the reactors at Fukushima Daiichi at the time of multiple reactor meltdowns.
- that uranium mining remains within the definition of ‘nuclear action’ and that nuclear actions continue to be listed as MNES and the protected matters continue to be listed as the ‘environment’ and so be subject to full environmental assessment at the state level
- regulatory reform for existing operating mines
- the rehabilitation of abandoned mines, processing facilities and mines that have been in care and maintenance for more than two years and the rehabilitation of exploration sites.

### 5.1 Australia’s uranium mine legacy

Uranium mining in Australia began in the early 1900’s. At every site, even where rehabilitation activities have been undertaken, there are continuing pollution issues that require ongoing and active management and remediation, predominantly at a cost to government. The table below documents the known uranium mining projects and advanced exploration projects in Australia and their impact and status. The industry promise of better practice and improved standards has routinely failed to be realised and should not be used to delay the protection of the environment. The evidence shows that the human health and environmental consequences of uranium mining is unacceptable with a significant drain on public funds and an unacceptable long-term risk to the public and environment.

Active Mines	State	Impact/ Status
Beverley Four Mile	SA	Despite warnings against ISL mining in a 2003 Senate Inquiry into uranium regulations, the Beverley Four Mile ISL uranium mine was approved. The project was subject to legal action over Aboriginal Heritage issues <sup>40</sup> . There are ongoing concerns about the ability to remediate this mine. See more on ISL environmental legacies below.

<sup>40</sup> Yurabila 2009 – Media Release July 15<sup>th</sup> 2009. Minister Garrett Urged to Review Decision to Approve Beverley Four Mile Uranium Mine, Traditional Owners Awaiting Heritage Investigation. Stop the Bullying, Lies and Deceit. <https://yurabila.wordpress.com/media-releases/>

Olympic Dam	SA	There are extensive impacts and issues at BHP's Olympic Dam uranium mine <sup>41</sup> . The most pressing is the status of tailings dams. In 2019 the tailings facilities 1-3, 4 & 5 at Olympic Dam were risk rated as "extreme", with the consequences of failure having the potential to cause the deaths of 100 or more people <sup>42</sup> . The company is seeking to develop additional tailings facilities despite this risk and with no clear pathway to reducing this risk <sup>43</sup> . The tailings facility has been given an exemption from EPBC assessment. The broader expansion project is required to have environmental assessment under the EPBC Act but assessment has been deferred to the state <sup>44</sup> through a process which is largely seen as deficient given the regulatory exemptions that exist under the Roxby Downs Indenture Act. Other environmental issues include significant impacts on the mound springs of the Lake Eyre region from excessive water extraction, <sup>45</sup> the ongoing deaths of birds as a consequence of exposure to contaminants in evaporation ponds, <sup>46</sup> incidents of workers deaths, workers leaking information about BHP using manipulated averages of workers exposure to radiation and outdated radiation plans. <sup>47 48</sup> Many of the environmental and workers health and safety issues at the mine are overshadowed by the Roxby Downs Indenture Act which gives the operator special exemptions from almost every piece of relevant state legislation. This greatly restricts access to information about the mine's operations.
Pre-closure /care and maintenance		
Beverley	SA	The SA Department lists 59 spills between 1998 – 2012 (when the mine was placed into Care and Maintenance) including a spill of 62,000 litres of contaminated water in January 2002 and then 15,000 litres in May 2002. Beverley is an In-Situ Leach (ISL) mine which disposes of radioactive materials, heavy metals and acid mine waste by direct disposal to groundwater. While there is no ore extraction from the wells at Beverley, the site continues to operate as a regional hub processing and liquid waste disposal facility for the active Beverley Four Mile ISL mining operation. It also played this role for the Beverley North operations. The 2003 Senate Committee report into the regulation of uranium mining in Australia advised ISL mining "should not be permitted until more conclusive evidence can be presented on its safety and environmental impacts <sup>49</sup> ". No such evidence exists, it is our informed understanding

<sup>41</sup> Some spills and other incidents from 2003 to 2014 are listed at:

[http://minerals.dmitre.sa.gov.au/mines\\_and\\_developing\\_projects/approved\\_mines/olympic\\_dam/olympic\\_dam\\_incident\\_summary\\_since\\_2003](http://minerals.dmitre.sa.gov.au/mines_and_developing_projects/approved_mines/olympic_dam/olympic_dam_incident_summary_since_2003). Some spills and other incidents from 1987 to 2001 are listed at: <http://archive.foe.org.au/anti-nuclear/issues/oz/u/roxby/incidents>

<sup>42</sup> BHP 2019 - Tailings Facilities Disclosure: Response to the Church of England Pensions Board and the Council on Ethics Swedish National Pension Funds [https://www.bhp.com/-/media/documents/environment/2019/190607\\_coe.pdf?la=en](https://www.bhp.com/-/media/documents/environment/2019/190607_coe.pdf?la=en)

<sup>43</sup> EPBC notices Submission #4210 BHP Referral Olympic Dam tailings expansion

<http://epbcnotices.environment.gov.au/entity/annotation/Offd8a29-a590-e911-8f1d-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1562747300689> & <http://epbcnotices.environment.gov.au/entity/annotation/Offd8a29-a590-e911-8f1d-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1562747300689>

<sup>44</sup> <http://epbcnotices.environment.gov.au/entity/annotation/f1e59361-4a6a-ea11-b9e9-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1585021631235>

<sup>45</sup> Mudd, G M, 2000, Mound Springs of the Great Artesian Basin in South Australia: A Case Study From Olympic Dam. Environmental Geology, 39 (5), pp 463-476. [www.springerlink.com/link.asp?id=100512](http://www.springerlink.com/link.asp?id=100512), posted at: <http://archive.foe.org.au/sites/default/files/Mound%20Springs%20Mudd%201998.pdf>

Mudd, G M, 1998, The Long Term Sustainability of Mound Springs In South Australia: Implications For Olympic Dam. Proc. "Uranium Mining & Hydrogeology II Conference", Freiberg, Germany, September 15-17 1998, pp 575-584. <http://users.monash.edu.au/~gmudd/files/1998-UMH-2-ODam-v-MoundSprings.pdf>

Daniel Keane, "The sustainability of use of groundwater from the Great Artesian Basin, with particular reference to the south-western edge of the basin and impact on the mound springs", <http://archive.foe.org.au/sites/default/files/Keane%20Mound%20Springs%2097.pdf>

<sup>46</sup> ABC, 11 Jan 2005, 'WMC acknowledges tailings dangerous for birds', [www.abc.net.au/news/2005-01-11/wmc-acknowledges-tailings-dangerous-for-birds/616658](http://www.abc.net.au/news/2005-01-11/wmc-acknowledges-tailings-dangerous-for-birds/616658)

<sup>47</sup> *The Monitor*, 1 April 2009, 'BHP Billiton opens up on tailings',

<http://web.archive.org/web/20090912230611/http://themonitor.com.au/editions/2009/APR01-09.pdf>

<sup>48</sup> Michelle Wiese Bockmann, 10 March 2006, 'Waste fears at uranium mine', *The Australian*

<sup>49</sup> Senate References and Legislation Committee, October 2003, 'Regulating the Ranger, Jabiluka, Beverley and Honeymoon uranium mines', [www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Environment\\_and\\_Communications/Completed%20Inquiries/2002-04/uranium/index](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed%20Inquiries/2002-04/uranium/index)

		that the groundwater and aquifers below the three Beverley mine sites will become sacrifice zones with permanent contamination <sup>50</sup> .
Beverley North	SA	Between 2012 and 2018 11 incidents, license breaches and spills were recorded with the SA Government. The most recent in 2018 involved a spill of 395 litres of iron dissolution solution containing uranium of which an estimated 320 litres entered an undisturbed environment. Beverley North is also an ISL mine – see above for risks associated with ISL mining <sup>51</sup> .
Honeymoon	SA	The Honeymoon mine was approved in 1981 and has changed ownership multiple times. There was trial mining at the site in the 1980's and again in the late 1990's - early 2000's. During this second period of trial mining there were six spills releasing over 40,000l <sup>52</sup> . The mine only began formally operating in 2011 and was placed in care and maintenance shortly after in 2013. In that brief time the mine reported four incidents: 4m <sup>3</sup> of uranium oxide concentrate slurry leaking in 2011; a 30m <sup>3</sup> spill in 2012 – later revised as 441m <sup>3</sup> as a result of 16 cannister lids failing under pressure – affecting 11,800 m <sup>2</sup> ; dust and fumes released – expected to be from UOC in 2012; and later in 2012 as a result of an air valve being left open a chain of events caused 20l of foam from a precipitation tank – covering 16m <sup>2</sup> – to spill outside the bund area. The mine is also an ISL mine – see details in Beverley for the inherent risks and long-term pollution risks associated with ISL <sup>53</sup> . The project is clearly uneconomic and has significant environmental risks. Over a 39-year project life the mine has operated for just two years and has had multiple owners and operators. The deterioration of infrastructure at the site is likely to be a significant barrier to any current plans to restart operations. This mine should be required to close permanently with complete rehabilitation before any attempts are made by the current company – Boss Resources - to abandon the mine or sell to an even smaller company who may not have the capability to rehabilitate.
Ranger	NT	At Australia's longest running uranium operation mining has stopped and processing of ore stockpiles is continuing ahead of a mandated end of operation in January 2021. Rehabilitation and closure criteria are still being developed and rehabilitation works are the growing focus of attention. It is expected that rehabilitation costs will be in excess of \$1billion. In 2009 it was revealed that there had been over 150 leaks, spills and license breaches and that 100,000 litres of contaminated water was leaking from the tailings daily <sup>54</sup> . A 2005 incident led to 150 people being exposed to drinking water containing uranium levels 400 times greater than safety standards allow <sup>55</sup> . In 2013 a leach tank collapsed spilling over 1 million litres of radioactive acid. Mine owner Rio Tinto and operator ERA have committed to rehabilitate the site however there are significant concerns about the prospects of successful rehabilitation.
<b>Closed Mines</b>		
Alligator River Region	NT	Between 1959 and 1965 there were thirteen uranium deposits that produced about 840 tonnes of uranium. In 2006 the federal government provided funding for four years of rehabilitation for these sites. This area is now the responsibility of the Australian government <sup>56</sup> . It is unclear how successful rehabilitation efforts have been or the extent of ongoing costs to government to manage these sites.
Hunters Hill	NSW	Hunters Hill was a processing facility in NSW. The site was abandoned in 1915, housing was built around the site up until the 1970's when concerns emerged around the risk of radiation exposure. Subsequently houses were bought and demolished by the government but without site remediation. In

<sup>50</sup> Beverley Incident Report Department of Mines and Energy SA  
[http://www.energymining.sa.gov.au/minerals/mining/mines\\_and\\_quarries/beverley\\_and\\_beverley\\_north\\_mines/beverly\\_uranium\\_mine\\_incident\\_summary\\_report](http://www.energymining.sa.gov.au/minerals/mining/mines_and_quarries/beverley_and_beverley_north_mines/beverly_uranium_mine_incident_summary_report)

<sup>51</sup> Beverley North Incident Report Department of Mines and Energy SA  
[http://www.energymining.sa.gov.au/minerals/mining/mines\\_and\\_quarries/beverley\\_and\\_beverley\\_north\\_mines/beverly\\_north\\_uranium\\_mine\\_incident\\_report](http://www.energymining.sa.gov.au/minerals/mining/mines_and_quarries/beverley_and_beverley_north_mines/beverly_north_uranium_mine_incident_report)

<sup>52</sup> Honeymoon Incident Report Department of Energy and Mines SA  
[http://www.energymining.sa.gov.au/\\_data/assets/pdf\\_file/0006/246417/honeymoon\\_reporting.pdf](http://www.energymining.sa.gov.au/_data/assets/pdf_file/0006/246417/honeymoon_reporting.pdf)

<sup>53</sup> Honeymoon Incident Report Department of Energy and Mines SA  
[http://www.energymining.sa.gov.au/minerals/mining/mines\\_and\\_quarries/honeymoon\\_uranium\\_mine/honeymoon\\_uranium\\_mine\\_incident\\_report\\_summary](http://www.energymining.sa.gov.au/minerals/mining/mines_and_quarries/honeymoon_uranium_mine/honeymoon_uranium_mine_incident_report_summary)

<sup>54</sup> Sydney Morning Herald 2009. Polluted water leaking into Kakadu from uranium mine  
<https://www.smh.com.au/national/polluted-water-leaking-into-kakadu-from-uranium-mine-20090312-8whw.html>

<sup>55</sup> Supervising Scientist Report 184. Investigation of Potable Water Contamination Incident at Ranger Mine March 2004.  
<https://www.environment.gov.au/system/files/resources/05208266-9122-4eb9-88b2-e5e5787ed8b3/files/ssr184-investigation-potable-water-contamination-incident-ranger-mine-march-2004.pdf>

<sup>56</sup> Supervising Scientist 2018 – Uranium Mining in the Alligator Rivers Region Fact Sheet  
<https://www.environment.gov.au/science/supervising-scientist/publications/uranium-mining-in-alligator-rivers-region>

		2008 a government inquiry revealed details of the site <sup>57</sup> . After decades of delay and denial the government agreed to a remediation process in 2011 – original plans to move the material to a waste facility at Kemps Creek were abandoned after a community backlash. <sup>58</sup> In 2019 a proposal to encapsulate and store the material on site was also rejected by the local council and residents. <sup>59</sup> The problem continues without resolution or a clear pathway to remove the contamination.
Mary Kathleen	QLD	The site was rehabilitated between 1981 – 1985 at a cost of \$19 million. Independent research through site visits have shown long term environmental legacies from the site, despite rehabilitation. There is ongoing seepage of radioactive radium and thorium from the tailings, acid mine drainage and ongoing low-level uptake of heavy metals and radionuclides into vegetation. <sup>60 61</sup>
Mt Painter	SA	After several mining and exploration ventures beginning in 1910 the mine was eventually abandoned in 1999. The site remains unrehabilitated. <sup>62</sup>
Nabarlek	NT	During operations the mine experienced leaks and spills and uncontrolled run off from the site (1981, 1982, 1983, 1984, 1989) and tailings leaks (1983). The site was rehabilitated but the tailings continue to be a source of pollution, there are ongoing impacts on groundwater and significantly elevated gamma radiation rates compared to pre mining. <sup>63</sup> Ongoing monitoring is required and funded by government.
Port Pirie	SA	Port Pirie was a processing facility for uranium ore in Australia. The site now holds approximately 200,000 tonnes of tailings over 26 hectares. The dams are within 300 meters of homes, there was a lack of fencing for many years making the site accessible to children who would play at the site and the tailings walls failed in 1981 during high tides. Stop gap measures were taken to cap tailings and increase the wall height, build fences and develop a trench and evaporation pond to collect run off – at a cost of \$1 million. The site has also been used to dump asbestos and continues to be used for slag dumping. In 2016 the SA Government released an environmental management plan for the site identifying climate change as a significant risk to the existing structures and groundwater levels that could compromise any containment at the site – this report does not outline further rehabilitation but focuses on management including security, signage and monitoring. <sup>64</sup>
Radium Hill	SA	A 2003 report by the SA Government revealed that the site contains approx. 400,000 tonnes of tailings and was used as a de-facto low level waste repository between 1981 – 1998. During this time, it is said the mine was rehabilitated. The SA Department states: “There are localised areas with some chemical or metals contamination where ecological risk exceeded screening levels for flora and soil invertebrate...” and that the mineral resource division is developing a long-term management strategy. <sup>65</sup> The site remains in need of ongoing monitoring and rehabilitation – at a cost to government.
Rum Jungle	NT	Rehabilitation efforts have repeatedly failed. As a result of severe acid metalliferous drainage and radiation pollution from the site there are significant impacts on the East Branch of the Finnis River and downstream environments. A draft EIS for the rehabilitation has been released in late 2019 but there is

<sup>57</sup> NSW Legislative Council – 2008 - Report 28 - General Purpose Standing Committee No. 5 The former uranium smelter site at Hunter's Hill Ordered to be printed 30 September 2008 according to Standing Order 231

<sup>58</sup> Sydney Morning Herald (2012) [Kemps Creek not getting contaminated Hunters Hill soil](https://www.smh.com.au/national/nsw/kemps-creek-not-getting-contaminated-hunters-hill-soil-20140222-338of.html) <https://www.smh.com.au/national/nsw/kemps-creek-not-getting-contaminated-hunters-hill-soil-20140222-338of.html> Feb 22, 2014

<sup>59</sup> ABC 2019 Hunters Hill Residents reject plan to store radioactive waste in their street, Michelle Brown, 24 July 2019 <https://www.abc.net.au/news/2019-07-24/hunters-hill-radioactive-waste-plan-rejected/11339572>

<sup>60</sup> Lottermoser, B.G. 2011, Colonisation of the rehabilitated Mary Kathleen uranium mine site (Australia) by Calotropis procera: Toxicity risk to grazing animals. Journal of Geochemical Exploration, 111 (1-2), pp 39-46.

Lottermoser, B.G; Costelloe, M.T; Ashley, P.M. 2005, Contaminant dispersion at the rehabilitated Mary Kathleen uranium mine, Australia. Environmental Geology, 48 (6), pp 748-761.

<sup>61</sup> Mudd, G M & Diesendorf, M, 2010, Uranium Mining, Nuclear Power and Sustainability - Rhetoric versus Reality. In "Sustainable Mining 2010 Conference", Australasian Institute of Mining and Metallurgy (AusIMM), Kalgoorlie, Western Australia, Australia, August 2010, pp 315-340. <https://www.ausimm.com.au/publications/epublication.aspx?ID=5676>

<sup>62</sup> Brugger, J & Ansermet, S & Pring, A (2006-06-19). Uranium mineral from Mt Painter, northern Flinders Ranges, South Australia. Museum of Victoria.

<sup>63</sup> Mudd, G.M., 2008, 'Radon Releases From Australian Uranium Mining and Milling Projects: Assessing the UNSCEAR Approach'. Journal of Environmental Radioactivity, 99 (2), pp 288-315. Available from [Gavin.Mudd@monash.edu](mailto:Gavin.Mudd@monash.edu)

<sup>64</sup> SA Department of State Development 2016 Port Pirie – Former Uranium & Rare Earth Treatment Plan – Radiation And Environment Management Plan.

<sup>65</sup> SA Department of Mines and Energy. 2020. Website accessed 24/3/2020. Radium Hill [http://www.energymining.sa.gov.au/minerals/mining/former\\_mines/radium\\_hill\\_mine](http://www.energymining.sa.gov.au/minerals/mining/former_mines/radium_hill_mine)

		yet to be a cost estimate or commitment to fund. It is broadly accepted that rehabilitation will be carried out by the NT government and funded by the Commonwealth. <sup>66</sup>
Wild Dog	SA	A small mine that operated from 1953-1955, the site has never been properly rehabilitated, fencing has been ripped open making the site accessible to the public. On a site visit in 2012 there was no signage about radiation risks. <sup>67</sup>
Approved mines that have never opened		
Kintyre	WA	Has state and federal environmental approval but requires significant other approvals. There is no indication the company, Cameco, will pursue mining. Rehabilitation of exploration drilling has been undertaken but the Department continues to monitor the effectiveness of that work. <sup>68</sup>
Mulga Rock	WA	Vimy Resources has state and federal environmental approval, but they require significant other approvals to develop the mine. They have been actively and unsuccessfully trying to secure funds to develop the mine. They are revising their Definitive Feasibility Study <sup>69</sup> .
Wiluna	WA	Has state and federal environmental approval but requires significant other approvals. The company continues to consider ways to make the mine feasible and divest non-core assets. Toro are now focused on exploration for gold <sup>70</sup>
Yeelirrie	WA	Has state and federal environmental approval but requires significant other approvals and the company Cameco has no immediate plans to develop given the sustained low uranium price. <sup>71</sup>
Advanced Exploration		
Ben Lomond	QLD	The Qld government currently has a ban on uranium mining so this project is unable to be developed
Manyingee	WA	The WA government currently has a ban on uranium mining so this project is unable to be developed
Oban	SA	Requires rehabilitation of exploration activity
Samphire	SA	Requires rehabilitation of exploration activity
Valhalla	QLD	The Qld government currently has a ban on uranium mining so this project is unable to be developed
Westmoreland	QLD	The Qld government currently has a ban on uranium mining so this project is unable to be developed
Proposals that have been stopped		
Angela Pamela	NT	Unsure of the rehabilitation status of earlier exploration activities
Jabiluka	NT	Following a sustained campaign by the Mirarr Traditional Owners this site underwent rehabilitation of mining activities with the return of mineralized ore, backfilling of the mine decline and removal of the retention pond and other site infrastructure.
Koongarra	NT	After sustained advocacy by the Djok Traditional Owner the Koongarra project area has now been formally incorporated into the Kakadu National Park World Heritage region. There remains uncertainty around the status of rehabilitation works and needs.
Mt Gee	SA	Unsure of rehabilitation of exploration activities

Given the ongoing failure of the uranium sector to meet license conditions, contain radiation and wastes, protect workers and communities or remediate uranium mines the most pragmatic and cost-effective response is to prohibit any further uranium mining in Australia. Isolating the damage done by the industry and requiring the important work of remediation and rehabilitation would limit further exposure and contamination. In many ways the trajectory of Australia's uranium sector reflects that of the asbestos mining industry. The product works, but at high cost and it is increasingly outperformed by cheaper, more popular

<sup>66</sup> Draft EIS Rum Jungle Rehabilitation Project 2020

<sup>67</sup> Mineral Policy Institute 2014 – Wild Dog <http://www.mininglegacies.org/mines/south-aust/wild-dog/>

<sup>68</sup> Correspondence with the WA Department of Mines, Industry, Regulation & Safety 7<sup>th</sup> July 2019.

<sup>69</sup> Vimy Resources Dec 2019 – Quarterly Activities Report <http://clients3.weblink.com.au/pdf/VMY/02197673.pdf>

<sup>70</sup> Toro Energy Annual Report 2019

<https://hotcopper.com.au/documentdownload?id=uOMxKKzFkiWRTLKhOROKAxjvTDYD4w%2B7yBKZtPh8ke92GA%3D%3D>

<sup>71</sup> Cameco 2020 Quarterly Report – Managements Discussion and Analysis <https://s3-us-west-2.amazonaws.com/assets-us-west-2/quarterly/CCO-2019-Q4-MDA-FS-and-Notes.pdf> pg 73

and less hazardous alternatives. In this time of structural sector decline it is prudent to maintain active federal oversight in order to reduce the chances of further future cost-shifting to the public purse.

### *In Situ Leach Mining:*

In Situ Leach (ISL) mining at Beverley, Beverley North & Four Mile involves pumping acid into an aquifer. This dissolves the uranium ore and other heavy metals and the solution is then pumped back to the surface for processing. The small amount of uranium is separated at the surface. The remaining liquid radioactive waste – containing radioactive particles, heavy metals and acid – is then simply dumped in groundwater. From being inert and immobile in the ore body, the radionuclides and heavy metals are now bioavailable and mobile in the aquifer.

A 2004 CSIRO report stated:<sup>72</sup> *"As stated in the Beverley Assessment Report, the bleed solutions, waste solutions from uranium recovery, plant washdown waters and bleed streams from the reverse osmosis plants are collected prior to disposal into the Namba aquifer via disposal wells. These liquid wastes are combined and concentrated in holding/evaporation ponds, with excess injected into selected locations within the mined aquifer. The injected liquid is acidic (pH 1.8 to 2.8) and contains heavy metals and radionuclides originating from the orebody."*

There are unresolved issues about the long-term management of those wastes, which are currently disposed of with no requirements for rehabilitation. For example, Heathgate Resources has no plans to clean up the aquifer as it says the pollution will 'attenuate' – that the aquifer will return to its pre-mining state over time. This claim has been queried by the scientific community as being speculative with no firm science behind it. Groundwater expert Dr Gavin Mudd asserts that General Atomics has withheld information relevant to the disposal of wastes in groundwater<sup>73</sup>.

The 2003 Senate References and Legislation Committee report, discussed in more detail below, stated: *"The Committee is concerned that the ISL process, which is still in its experimental state and introduced in the face of considerable public opposition, was permitted prior to conclusive evidence being available on its safety and environmental impacts... The Committee recommends that, owing to the experimental nature and the level of public opposition, the ISL mining technique should not be permitted until more conclusive evidence can be presented on its safety and environmental impacts. Failing that, the Committee recommends that at the very least, mines utilising the ISL technique should be subject to strict regulation, including prohibition of discharge of radioactive liquid mine waste*

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<sup>72</sup> Taylor, G.; Farrington, V.; Woods, P.; Ring, R.; Molloy, R. (2004): 'Review of Environmental Impacts of the Acid In-Situ Leach Uranium Mining Process', CSIRO Land and Water Client Report.

<sup>73</sup> Mudd, G M, 2020 Personal Correspondence 2020 & 1998, An Environmental Critique of In Situ Leach Mining: The Case Against Uranium Solution Mining. Research Report for Friends of the Earth (Fitzroy) with The Australian Conservation Foundation, July 1998, 154p,

<http://users.monash.edu.au/~gmudd/files/1998-07-InSituLeach-UMining.pdf>

Mudd, G M, 2001, Critical Review of Acidic In-Situ Leach Uranium Mining: 2 Soviet Block and Asia. Environmental Geology, 41 (3-4), pp 404-416, [www.springerlink.com/link.asp?id=100512](http://www.springerlink.com/link.asp?id=100512)

Mudd, G M, 2001, Critical Review of Acidic In-Situ Leach Uranium Mining: 1 USA and Australia. Environmental Geology, 41 (3-4), pp 390-403, [www.springerlink.com/link.asp?id=100512](http://www.springerlink.com/link.asp?id=100512)



*to groundwater, and ongoing, regular independent monitoring to ensure environmental impacts are minimised."*

Given the absence of conclusive information in environmental assessment documents and the history of spills, leaks and accidents, there can be no confidence that issues raised by the 2003 Senate Committee have been resolved. We urge the Review Committee to consider this as an additional reason for prohibiting uranium mining across Australia. At an absolute minimum there is no credible rationale for further reducing Commonwealth oversight or scrutiny of the uranium sector at this time.

## 5.2 Regulating Uranium – Inquiries

Uranium is a mineral with unique properties and risks. It causes specific impacts at the mine site and produces a product that inevitably becomes long lived radioactive waste. The sector lacks social license, is suffering a sustained decline in commodity price and remains actively contested.

Uranium mining in Australia has been the subject of a series of reviews and inquiries over many years. Many of these processes have resulted in important recommendations that are directly relevant to uranium as a MNES. Below is a summary of reports, recommendations and regulations that we believe support the case for prohibition of uranium mining in Australia. At the very least the finding detailed below support the retention of the uranium trigger, regulatory reform and a wider national review of the long-term impacts of uranium mining and the capability of uranium mine regulations to manage those impacts.

It is important to note a significant inquiry which has not occurred. In September 2011 following the multiple nuclear reactor meltdowns at Fukushima, the UN Secretary-General called on Australia to conduct "an in-depth assessment of the net cost impact of the impacts of mining fissionable material on local communities and ecosystems." A month later Dr Robert Floyd, director-general of the Australian Safeguards and Non-Proliferation Office of the Department of Foreign Affairs and Trade confirmed "that Australian obligated nuclear material was at the Fukushima Daiichi site and in each of the reactors." Despite this important knowledge about Australia's direct role in the contamination that continues to be released from the Fukushima reactors there is yet to be inquiry into the net cost impact of mining uranium in Australia. This should occur as a matter of urgency and we urge the Review Committee to reflect this in your deliberations.

### *Bureau d'audiences publiques sur l'environnement (BAPE) 2014*

The Bureau d'audiences publiques sur l'environnement (BAPE) Inquiry in Quebec, Canada is the most recent and comprehensive review of uranium mining to occur globally. The findings of the BAPE Inquiry into the environmental and health impacts of uranium mining demonstrate that uranium is different to other minerals and requires specific regulation to meet the challenges mining presents. The BAPE panel found that there are "significant gaps in scientific knowledge of the impacts of uranium mining on the environment and public health." BAPE recommended that a new regulatory system in Canada would be needed to regulate uranium mining. In an Australian context, the BAPE inquiry demonstrates the need for further scientific studies into the impacts of uranium mining on the environment and

public health. Such a study would be broadly supported by environment groups who have for a long time called for further studies, particularly into the health outcomes near existing uranium mines. The BAPE findings do not support a reduction in oversight and regulation for the uranium sector, but instead support further studies and increased regulations and, importantly, a prohibition on uranium mining in the absence of evidence about the impacts of uranium mining on health and the environment.

### *Queensland Uranium Implementation Committee 2013*

In 2012 when the Newman LNP government in Queensland lifted the state policy ban on uranium mining a committee was formed to consider the regulatory implications. In 2015 Queensland Labor was returned to government and promptly reintroduced the ban. Recommendations from the committee clearly demonstrate that uranium mining is different, requires high levels of oversight and that there are higher risks and different types of expertise needed to consider and address these risks. The committee also highlighted that the industry lacks public support and requires higher levels of public consultation. All these findings remain true. Recommendations specific to developing guidelines and responses that address the unique risks posed by uranium mining are shown below, other recommendations were made by the committee on establishing MOUs, stakeholder groups and whole of government working groups.

Recommendations from the committee included:

- A coordinated assessment process by referral of proposal to the Coordinator General
- Develop a MOU between regulators
- Develop specific mine safety and health guidance – for best standards for all stages of uranium mining
- Develop guiding principles for emergency response – and education and training for emergency workers
- Develop outcome focused environmental model conditions specific to uranium mining
- Review rehabilitation guidance to develop criteria specific to uranium mining
- The Queensland Government should apply a five per cent royalty regime to uranium, but also investigate use of a higher rate once the price of uranium reaches a certain higher threshold.

### *WA Uranium Advisory Group 2012*

In 2012, shortly after the state Liberal government lifted the state ban on uranium mining a uranium advisory group was established. In 2017 WA Labor was returned to government and promptly reintroduced the ban. The former Minister promised “best practice regulation will govern any future uranium mining.” The group, led by the University of WA and CSIRO, reviewed WA’s regulations against world’s best practice and found significant gaps. It made recommendations to:

- Improve transparency,
- Ensure broad public consultation,
- Review OH&S legislation,
- Consider cumulative impacts
- Develop guidelines that integrate all aspects of managing uranium mining wastes

These recommendations were not adopted. The WA government took a clear position to ‘normalise’ uranium throughout regulations.

*ECITA Committee Senate Inquiry into the adequacy of federal regulation of Jabiluka, Ranger, Beverley and Honeymoon uranium mines – 2003*

The Committee made 25 recommendations for the Northern Territory and South Australia, with many more specific recommendations for regulating individual mine sites. This inquiry made very clear and specific recommendations regarding the importance of federal involvement in regulating the uranium sector. These recommendations were strongly supportive of increasing the federal government’s role, citing the unique public health and the environmental hazards and risks posed by uranium mining.

These recommendations outline a preference for regulation through environment departments acknowledging the conflicting objectives within resources and mines departments. Recommendations from the Committee included (in summary):

- Groundwater protection and quality limits
- Increased monitoring of groundwater impacts
- Compliance with water quality limits
- Independent monitoring
- More systematic approach to collecting and analysing data
- Public release of all data relating to incidents
- An increased role for the federal government in uranium assessment and regulation
- Confidentiality clauses to protect anonymity of concerned individuals
- Improved consultation and communication with stakeholders
- Independent inspection program of stockpiles and prevent discharge from runoff

Other findings include (in full)<sup>74</sup>:

- The Committee is of the view that uranium mining presents unique hazards and risks to both human health and the environment. Accordingly, its regulation at both the Commonwealth and State levels should be primarily the responsibility of environment agencies rather than agencies whose principal concern is with the advancement of mining interests (para 3.94).
- The Committee recommends that all serious leaks and spills be investigated by Environment Australia and that minor leaks and spills be scrutinised by South Australia’s Chief Inspector of Mines in collaboration with EA. Given that different regulatory requirements attach to different categories of incidents, the Committee also recommends that the definitions as to categories of incidents be the subject of public consultation and be publicly available. A regulatory response, publicly available, should be provided following the investigation of an incident (para 3.109).
- The Committee recommends that, owing to the experimental nature and the level of public opposition, the ISL mining technique should not be permitted until more conclusive evidence can be presented on its safety and environmental impacts. Failing that, the Committee recommends that at the very least, mines utilising the ISL technique should be subject to strict regulation, including prohibition of discharge of

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<sup>74</sup> Environment, Communications, Information Technology and the Arts Committee (2003) Senate Inquiry into the adequacy of federal regulation of Jabiluka, Ranger, Beverley and Honeymoon uranium mines.

radioactive liquid mine waste to groundwater, and ongoing, regular independent monitoring to ensure environmental impacts are minimised.

- Fund and establish a culturally appropriate forum for Traditional Aboriginal Owners and other local Aboriginal people to monitor and commission independent research in relation to social and environmental impacts of mining operations and to develop policy recommendations in response to the findings.

The above Inquiries all conclude that uranium is different to other minerals, that there are unique risks and hazards and that different regulatory approaches are required to address these unique risks. The industry continues to have leaks, spills, accidents and breaches that expose workers and has a persistent pattern of failure to rehabilitate mine sites or isolate waste from the environment. Uranium is different, it has long lasting radioactive materials that require higher levels of consideration, longer term containment, it poses a greater risk to workers and the environment. Mining of uranium creates many pathways for radiation into the environment through dust and water. The industry has made promises about their performance and standards and have continuously failed to deliver on these self-declared goals. We call for the prohibition of uranium mining through the EPBC Act 1999 in line with existing prohibitions and policy bans in Queensland, New South Wales, Victoria, Tasmania and Western Australia.

### 5.3 Normalising uranium – undermining the risk

In recent years the Minerals Council of Australia (MCA) has become an active advocate of uranium mining. The membership of the MCA is gradually becoming made up of fringe uranium and coal companies and their climate and nuclear policies are attracting increasing internal and external criticism and scrutiny. The MCA presents as the peak industry group for the mining sector but is increasingly focused on promoting minerals that are economically marginal, at odds with public sentiment and lacking social license. Two of Australia's most controversial minerals, coal and uranium, receive disproportionate attention from the MCA. This is particularly noticeable in relation to uranium as the sector is economically marginal. This positioning may be attributed to both the career history of senior MCA executives and the membership of the MCA.

The MCA is disproportionately dominated by a small group of corporate activists who are non-producing uranium companies. These are seeking to 'normalize' and integrate uranium into risk-based regulations and removing special provisions. There is a dangerous trend in seeking to normalise uranium which has consequences for health and safety. Establishing a culture that seeks to normalise radioactive material and diminishing the risks puts workers at harm. This is evident in a paper written by consultant radiologist and ARPANSA Radiation Health and Safety Advisory Council member Dr Peter Karamoskos who identifies that it "is estimated that up to 50 per cent of underground uranium miners in Australia do not use their masks, and thus drastically increase their risk of lung cancer while underestimating their actual radiation dose (since this is calculated assuming PPEs are used)."<sup>75</sup> This could be attributed to many factors, as outlined by Dr Karamoskos workers find personal protective equipment (PPEs) are hot and uncomfortable. But it also could be a choice they make based

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<sup>75</sup> Karamoskos, Peter, 'Nuclear power & public health', *Evatt Journal*, Vol. 10, No. 1, December 2011<<https://evatt.org.au/papers/nuclear-power-public-health.html>>

on an absence of information about the risks of radiation which come from a lax radiation safety culture.

Dr Karamoskos describes the risk of uranium mine workers: "At the Olympic Dam underground uranium mine, the total dose per miner is approximately 6 mSv, of which 2-4 mSv (allowing for the new ICRP dose coefficients) are due to radon and the balance due to gamma radiation..... The average miner at Olympic Dam is in his 20's and stays on average five years at the site. A typical calculation using the linear no threshold model and the latest BEIR-VII figures of radiation carcinogenesis risks indicates miners at Olympic Dam therefore have a 1:420 chance of contracting cancer, most likely lung cancer. Note that the research demonstrates that the risk of developing lung cancer is greater for younger workers. These risks are not insubstantial. Radiation safety and risk principles can be quite complex and it is debatable whether miners have the training to understand the basis, or are even informed of the risks in a comprehensive and accurate manner that they can comprehend and make an informed work decision."<sup>76</sup>

Seeking to normalise uranium has dangerous consequences for radiation health and safety culture on mine sites. Radiation has very real and significant risks to workers and, as suggested by Dr Karamoskos, workers may not be receiving the necessary training to properly understand those risks and take occupational health and safety seriously. The lobbying campaign run by the MCA, driven by the private interests of predominately junior uranium companies within the MCA exacerbates these risks by seeking to downplay the unique and dangerous properties of uranium.

#### 5.4 Roxby Downs Indenture Act – Case Study:

The SA *Roxby Downs (Indenture Ratification) Act 1982*, a piece of specific legislation for BHP's Olympic Dam copper-uranium mine, overrides a suite of state laws. This has significant implications for the integrity and capacity of state processes to meet EPBC Act 1999 benchmarks and seriously undermines the public interest. During parliamentary debate on the Indenture Ratification Act, SA Liberal Party industry spokesperson Martin Hamilton-Smith said in Parliament, in relation to the *Roxby Downs (Indenture Ratification) (Amendment Of Indenture) Amendment Bill 2011*, that "every word of the [indenture] agreement favours BHP, not South Australians."<sup>77</sup>

The Productivity Commission Draft Report on Resource Sector Regulation, March 2020, explains that the "*Roxby Downs (Indenture Ratification) Act 1982 (SA)* overrides any inconsistent provisions of other laws, such as licensing, environment, heritage, and freedom of information, in the area of the town and mine. Instead, BHP has the power to make decisions about this legislation independently (in consultation with the South Australian Government)."<sup>78</sup>

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<sup>76</sup> *ibid*

<sup>77</sup> Martin Hamilton-Smith, 8 November 2011, SA Parliament <http://web.archive.org/web/20140308080015/http://martinhamilton-smith.com.au/Features/Speeches/tabid/86/articleType/ArticleView/articleId/3250/Roxby-Downs-Indenture-Ratification-Amendment-Of-Indenture-Amendment-Bill-2011.aspx>

<sup>78</sup> Productivity Commission 2020. Draft Report - Resources Sector Regulation. Pg 16. March 2020

Among the suite of laws outlined in section 7(2)(1) of the *Roxby Downs (Indenture Ratification) Act*, the *Development Act 1993* (SA) is included as a law that the Indenture Act "takes precedence over".<sup>79</sup> Under the EPBC bilateral agreement with SA<sup>80</sup> there is no mention of the Roxby Downs Indenture Act. The bilateral agreement does however accredit state environmental assessment processes, specifically the *Development Act 1993* (SA).

In effect, the federal government accredited the Indenture Act 1982 (SA) process to govern bilateral agreement EPBC Act assessments of Olympic Dam nuclear actions.

The federal Minister for Environment has made an EPBC Act decision<sup>81</sup> (19 March 2020) on BHP's "Olympic Dam Resource Development Project" Referral 2019/8570, that: "The project will be assessed by an accredited assessment under the (SA) *Development Act 1993*."

The *Development Act (SA) 1993* is overridden by the Indenture Act (SA) 1982. This concern is amplified given that the Indenture Act also takes precedence over the *Environment Protection Act (SA) 1993*; the *Native Vegetation Act (SA) 1991*; the *Natural Resources Management Act (SA) 2004* – incorporating water resource management issues; the *Freedom of Information Act (SA) 1991*; the *Mining Act (SA) 1971*; the *Aboriginal Heritage Act (SA) 1988* and a plethora of other SA Acts. Mining interests should not override public interests and the current approach lacks procedural rigour, independence and integrity.

ACF, Conservation Council SA and FoE Australia have repeatedly called on BHP to surrender these outdated legal privileges and to agree that Olympic Dam be governed by a full set of contemporary public interest laws, standards and due process in SA<sup>82</sup>.

BHP has failed to surrender the Indenture's outdated legal privileges since taking over Olympic Dam in 2005 and successive SA State governments have failed to seek reform of this historical legacy that has profound and adverse contemporary impacts.

The EPBC Act Review should recommend the Olympic Dam mine expansion Referral 2019/8570 is directly assessed under the EPBC Act, and not through a flawed bilateral agreement process that effectively gives precedence to the 1982 Indenture over the accredited assessment processes of the *SA Development Act 1993*.

The current system is failing to properly assess the risks associated with the planned expansion of the Olympic Dam mine, Australia's biggest operating uranium mine.

The Indenture's outdated legal privileges increase the environmental risk from a copper-uranium mine which has had significant impacts on the Lake Eyre region through excessive

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<sup>79</sup> These out-dated legal privileges were retained by the SA State Government in the Roxby Downs (Indenture Ratification) (Amendment of Indenture) Amendment Act 2011. No 49 of 2011 assented to 8.12.2011. Pg 3. 6—Amendment of section 7—Modification of State law

<sup>80</sup> Bilateral agreement made under section 45 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) relating to environmental assessment. 2014.

<sup>81</sup> EPBC Act Decision on Assessment Approach: Accredited Assessment Process [2019-8570-Assessment-Approach.pdf \(85.37 KB\)](#)

<sup>82</sup> For instance, see "BHP legal privileges in the Olympic Dam Indenture Act 1982 override SA laws" - briefing produced for ACF, Conservation SA and FOE Australia by David Noonan – June 2019. <https://nuclear.foe.org.au/wp-content/uploads/ODM-BHP-legal-privileges-Indenture-Act.pdf>

water extraction<sup>83</sup>; the ongoing deaths of hundreds of protected birds each year as a consequence of exposure to contaminants in evaporation ponds (documented in 2005 & 2019)<sup>84,85,86</sup>; incidents of workers deaths, workers leaking information about BHP using manipulated averages of workers exposure to radiation and outdated radiation leak plans<sup>87,88</sup>.

### *Current Olympic Dam developments and assessment:*

#### *EPBC 2019/8465 – Tailings Storage Facility 6*

In June 2019 BHP proposed to "construct, commission, operate and close an additional tailings storage facility cell, and associated infrastructure, at the Olympic Dam mine and processing facility for the purpose of enabling continued operations of up to approximately 200,000 tpa copper and associated products."<sup>89</sup>

In Dec 2019 the Department of Agriculture, Water and Environment (DAWE)<sup>90</sup> decided Tailings Storage Facility 6 (TSF 6) is not a 'controlled' action under the Act and as such does not require EPBC assessment. This federal decision followed on from SA State government approval to BHP for TSF 6 - which was granted in Nov 2019.

Significant issues and concerns about the status and risk posed by this massive new Tailings Storage Facility were raised in public submissions<sup>91</sup> and in the the referral decision. The Australian National Committee on Large Dams (ANCOLD) has given existing Olympic Dam TSFs an "Extreme" consequences category, a ranking that is given for facilities that, if the dam fails, would cause the death of 100 or more people. These concerns were dismissed by BHP

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<sup>83</sup> Mudd, G M, 2000, Mound Springs of the Great Artesian Basin in South Australia: A Case Study From Olympic Dam. *Environmental Geology*, 39 (5), pp 463-476. [www.springerlink.com/link.asp?id=100512](http://www.springerlink.com/link.asp?id=100512), posted at: <http://archive.foe.org.au/sites/default/files/Mound%20Springs%20Mudd%201998.pdf>

Mudd, G M, 1998, The Long Term Sustainability of Mound Springs In South Australia: Implications For Olympic Dam. Proc. "Uranium Mining & Hydrogeology II Conference", Freiberg, Germany, September 15-17 1998, pp 575-584.

<http://users.monash.edu.au/~gmudd/files/1998-UMH-2-ODam-v-MoundSprings.pdf>

Daniel Keane, "The sustainability of use of groundwater from the Great Artesian Basin, with particular reference to the south-western edge of the basin and impact on the mound springs",

<http://archive.foe.org.au/sites/default/files/Keane%20Mound%20Springs%2097.pdf>

<sup>84</sup> ABC, 11 Jan 2005, 'WMC acknowledges tailings dangerous for birds', [www.abc.net.au/news/2005-01-11/wmc-acknowledges-tailings-dangerous-for-birds/616658](http://www.abc.net.au/news/2005-01-11/wmc-acknowledges-tailings-dangerous-for-birds/616658)

<sup>85</sup> "Birds vs BHP: Evaporation ponds at BHP's Olympic Dam mine are killing hundreds of birds", *The Advertiser newspaper* 11 July 2019 <https://www.adelaidenow.com.au/news/south-australia/evaporation-ponds-at-bhps-olympic-dam-mine-are-killing-hundreds-of-birds/news-story/1b886e4946f87fb7a729e201282f5cfb>

<sup>86</sup> "Migratory Birds at Risk of Mortality if BHP Continues Use of Evaporation Ponds" briefing produced for ACF, Conservation SA and FoE Australia by David Noonan – June 2019.

<https://nuclear.foe.org.au/wp-content/uploads/ODM-Migratory-Birds-BHP-Evaporation-Ponds.pdf>

<sup>87</sup> *The Monitor*, 1 April 2009, 'BHP Billiton opens up on tailings', Pg. 12 <https://issuu.com/themonitornewspaper/docs/apr01-09>

<sup>88</sup> Michelle Wiese Bockmann, 10 March 2006, 'Waste fears at uranium mine', *The Australian*

<sup>89</sup> BHP Olympic Dam EPBC Referral 2019/8465 Tailings Storage Facility 6 (June 2019)

<http://epbcnotices.environment.gov.au/entity/annotation/Offd8a29-a590-e911-8f1d-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1585449097156>

<sup>90</sup> DAWE EPBC Act Decision (19 Dec 2019), Tailings Storage Facility 6 "is not a controlled action"

<http://epbcnotices.environment.gov.au/entity/annotation/d26cc369-d522-ea11-a521-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1585448767449>

<sup>91</sup> Joint ENGO submission to BHP Olympic Dam EPBC Act Referral 2019/8465 TSF 6 (David Noonan, lead author, June 2019) available at ACF website:

[https://d3n8a8pro7vhmx.cloudfront.net/auscon/pages/16149/attachments/original/1561529707/Joint\\_ENGO\\_Olympic\\_Dam\\_expansion\\_EPBC\\_submission.pdf?1561529707](https://d3n8a8pro7vhmx.cloudfront.net/auscon/pages/16149/attachments/original/1561529707/Joint_ENGO_Olympic_Dam_expansion_EPBC_submission.pdf?1561529707)

citing that ANCOLDs ranking does not account for the likelihood of TSF failure<sup>92</sup> and this BHP position was adopted in the decision and 'statement of reasons' by DAWE.

In August 2020 the International Council on Mining and Metals, the UN Environment Programme and the Principles for Responsible Investment and Principles for Responsible Investment released "Global Industry Standard on Tailings Management". We commend this to the PC to consider the goal of the Standard to strive "achieve the ultimate goal of zero harm to people and the environment with zero tolerance for human fatality"<sup>93</sup> and how to harmonise Australian regulations to meet this goal.

The only plausible scenario in which DAWE could understand the likelihood of an occurrence that would cause the TSF to fail would be through environmental assessment. We suggest that DAWE did not consider this issue or its severity with enough rigour in relation to the proposed TSF 6. The matter must now be addressed in the assessment of 2019/8570.

Independent environmental researcher David Noonan explains that the proposed TSF 6 would be "larger in area than the CBD of Adelaide – at 285 hectares, and up to 30 metres in height – equal to the height of the roof over the *Great Southern Stand* at the MCG. BHP states the total footprint area of TSF 6 is intended to be 416 hectares."<sup>94</sup>

The tailings wastes generated at Olympic Dam Mine (ODM) contain approximately "80% of the radioactivity associated with the original ore"<sup>95</sup> and since mining at the site began in 1988 it is estimated some 180 million tonnes of tailings have been produced.

The definition of nuclear actions under the EPBC Act 1999 include: establishing or significantly modifying a nuclear installation, mining or milling uranium ores. This activity is both associated with the mining and milling of uranium ore and could be regarded as the significant modification of a nuclear installation – given the size of the proposed TSF6 and nature of materials to be stored there. In fact, ARPANSA advised DAWE on 1 July 2019 that the proposed TSF 6 action can be considered a nuclear action under section 22(1)(e) of the EPBC Act due to the establishment of a large-scale disposal facility for radioactive waste.<sup>96</sup>

The decision that TSF 6 is not a controlled action is alarming given the definition of nuclear actions, the content and volume of the wastes proposed for the facility, and the established "extreme" consequences category of existing TSF's at ODM.

TSF 6 has been proposed because the Olympic Dam Mine has reached a point of limited tailings storage capacity, with operations of TSF 4 having already been extended and unable

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<sup>92</sup> Department of Agriculture, Water and Environment, 2020, Statement of Reasons. Olympic Dam Mine and Tailings Storage Facility 6 EPBC 2019/8465, p.2-3 <http://epbcnotices.environment.gov.au/entity/annotation/1fc85ef8-2546-ea11-b0a8-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1585039134518>

<sup>93</sup> International Council on Mining and Metals, the UN Environment Programme and the Principles for Responsible Investment and Principles for Responsible Investment (2020) Global Industry Standard on Tailings Management

<sup>94</sup> "BHP SEEK A TOXIC TAILINGS EXPANSION WITHOUT A FULL SAFETY RISK ASSESSMENT"

Briefing written by David Noonan for ACF, Conservation SA and FOE Australia, June 2019 <https://nuclear.foe.org.au/wp-content/uploads/ODM-Tailings-Waste.pdf>

<sup>95</sup> 1997 Olympic Dam Expansion Project Environmental Impact Statement, Summary, Tailings radiation control, p.21

<sup>96</sup> DAWE Statement of Reasons EPBC 2019/8465, (29 Jan 2020), p.3 [2019-8465 Statement of Reasons - TSF6.pdf \(2.47 MB\)](#)



to be further extended. TSF 4 should be closed and TSFs1-4 should be decommissioned. TSF 6 is intended to operate for the next 25 years in tandem with continued operations of TSF 5 – another “extreme” consequences tailings facility, in a 60:40 discharge of tails.

Since June 2019 ACF, Conservation Council SA and FoE Australia have repeatedly recommended a comprehensive Safety Risk Assessment of all Olympic Dam tailings and tailings storage facilities to determine the long-term (in the order of 10,000 years) risk to the public and the environment from all radioactive tailings produced and stored at ODM as a core part of an EPBC Act public environmental impact assessment process.<sup>97</sup>

As mining continues and storage capacity at TSF 5 and TSF 6 is consumed it can be expected that similar applications will be made in future. This type of piecemeal assessment fails to consider the cumulative impacts of tailings production and storage, misses opportunities to assess and review the operational standards at the existing facilities and sets a dangerous precedent for the management of some of the most toxic industrial wastes produced in Australia.

#### *EPBC 2019/ 8570 – Olympic Dam Resource Development Strategy*

Separate to the TSF 6 proposal BHP have referred the “Olympic Dam Resource Development Strategy”. On the 23rd March 2020 the DAWE accepted the project as a controlled action but has deferred assessment of the proposal to the SA Government under the *Development Act (SA) 1993*<sup>98</sup> through a bilateral agreement process. As discussed above the *Development Act (SA) 1993* is among a suite of laws that are overridden by the Roxby Downs Indenture Act and concerns remain about the scope of the assessment and the transparency of studies and management plans through this process.

Within the Bilateral Agreement Object D must be applied to the assesment. Object D states that “The parties will work cooperatively so that Australia’s high environmental standards are maintained by ensuring that: ... b. Matters of National Environmental Significance (NES) are protected as required under the EPBC Act; c. there are high quality assessments of the impacts of proposals on Matters of NES; and d. authorized actions do not have unacceptable or unsustainable impacts on Matters of NES.”

Applicable MNES that must be assessed and protected as required under the EPBC Act, include: “the environment” (the whole environment) consequent to uranium mining as a controlled “nuclear action”; Listed Bird Species and Migratory Bird Species subject to impact and mortality from BHP’s TSFs and Evaporation Ponds; and Mound Springs protected as an Endangered Ecological Community under the EPBC Act, along with the natural flows of fossil Great Artesian Basin waters on which the unique and fragile Mound Springs depend.

Please consider an over-view article on EPBC Act regulatory responsibilities to Matters of National Environmental Significance in Olympic Dam mine issues, currently before the

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<sup>97</sup> See Recommendations No.1 & No.2 in: <https://nuclear.foe.org.au/wp-content/uploads/Joint-ENGO-Recommendations-to-Federal-Gov-on-BHP-Olympic-Dam-Mine-Expansion-09Dec2019.pdf>

<sup>98</sup> Department of Agriculture, Water and Environment, 2020, Notice of Referral Decision. Olympic Dam Resource Development Strategy (EPBC 2019/8570) <http://epbcnotices.environment.gov.au/entity/annotation/f1e59361-4a6a-ea11-b9e9-00505684324c/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1585021631235>

Productivity Commission “Resources Sector Regulation Study”<sup>99</sup>. This includes a discussion of BHP’s “ESG Briefing: Tailings Dams” (June 2019)<sup>100</sup> which states (p.17) that if the the Olympic Dam tailings waste facilities fail there is the potential for the loss of life of over 100 employees.

The BHP Briefing (p.10) further explains that the “extreme” consequences category for Olympic Dam Tailings Storage Facilities includes potential impacts of an extreme loss of infrastructure and economics (which the Canadian Dam Association Dam Safety Guidelines 2007 cite to be in the order of US\$1 billion), and a major permanent loss of environmental and cultural values - with restoration stated to be “impossible”.

It is of concern that the BHP Olympic Dam Mine has been reported to not have a rehabilitation bond at federal or state levels<sup>101</sup>. Input to the Productivity Commission Resources Sector Regulation Study makes a Recommendation to: “Secure a Bond to cover 100% of project rehabilitation, waste management and closure liabilities at each resource project regulated in the federal jurisdiction.” This applies to Olympic Dam.

Given the significant risk posed by the existing ODM, the proposed new TSF 6 “extreme” consequences category facility and the major mine expansion project we strongly urge the Review Committee to consider and advise that such a project should be required to have a cumulative impact assessment - as recommended by the joint ENGO’s<sup>102</sup>. There is a clear need for wholistic project review, not the current practice of piecemeal consideration of different components. A greater level of federal oversight through DAWE to help ensure transparency is also critical to meet minimum community expectations on the environmental assessment process for such a significant project with great risk.

## 5.5 Yeelirrie Case Study:

This section outlines the assessment process and decisions at a state and federal level in response to the application by Cameco to mine uranium at Yeelirrie in the Northern Goldfields region of WA. This identifies problems with the current assessment process and highlights that these problems would be exacerbated if the EPBC uranium trigger were to be removed. Without the whole of assessment required through the EPBC Act many issues associated with the project may have never been identified. The Yeelirrie experience clearly shows the importance of the uranium trigger and higher levels of assessment for mining more generally. This section also demonstrates the urgent need for improved environmental legislation that seeks to prevent political influence in decision making and improves the

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<sup>99</sup> “BHP Olympic Dam Tailings: an “Extreme Risk” to Workers and to the Environment”, David Noonan, B.Sc., M.Env.St., Independent Environment Campaigner (28 August 2019), Submission No.1 Attachment, to the Productivity Commission Resources Sector Regulation Study, at: [https://www.pc.gov.au/\\_data/assets/pdf\\_file/0006/244788/sub001-resources-attachment.pdf](https://www.pc.gov.au/_data/assets/pdf_file/0006/244788/sub001-resources-attachment.pdf)

<sup>100</sup> “ESG Briefing; Tailings Dams” BHP June 2019 [https://www.bhp.com/-/media/documents/media/reports-and-presentations/2019/190607\\_esgbriefingtailingsdams.pdf?la=en](https://www.bhp.com/-/media/documents/media/reports-and-presentations/2019/190607_esgbriefingtailingsdams.pdf?la=en)

<sup>101</sup> David Noonan B.Sc., M.Env.St., Independent Environment Campaigner, Submission No.1 (28 August 2019), to the Productivity Commission Resources Sector Regulation Study [https://www.pc.gov.au/\\_data/assets/pdf\\_file/0004/244786/sub001-resources.pdf](https://www.pc.gov.au/_data/assets/pdf_file/0004/244786/sub001-resources.pdf)

<sup>102</sup> See the ACF, Conservation SA and FoE Australia submission to BHP “Olympic Dam Resource Development Strategy” EPBC 2019/8570 (David Noonan, lead author, 09 Dec 2019) at: <https://nuclear.foe.org.au/wp-content/uploads/2019-Dec-final-submission-joint-ENGOS-BHP-Olympic-Dam-EPBC-Referral-2019-8570.pdf>

agility in the Commonwealth environment department to identify and classify threatened and endangered species.

### *State process*

In early 2010's BHP Billiton commenced environmental studies at the proposed Yeelirrie site, including one of the most extensive subterranean fauna drilling programs ever conducted. In 2012 BHP sold the site to Cameco. There are many factors that led to the decision by BHP to sell including the results of the subterranean fauna testing and the drop in the global uranium price following the Fukushima nuclear reactor explosion. The decision may also have been influenced by the clear and public opposition from Traditional Owners who had directed their representative body to release a statement that they would not be negotiating with BHP as under no circumstances would the group support uranium mining.

Cameco released a Public Environment Review (PER) document in 2015, which was assessed as a 'controlled action' through the Commonwealth – WA Bilateral Agreement. In August 2016 the WA EPA recommended that the Yeelirrie project be rejected on the grounds that the project is inconsistent with three of the objectives of the WA Environmental Protection Act: the precautionary principle; the principle of conservation of biological diversity, and the principle of intergenerational equity. Following the EPA recommendation Cameco lodged an appeal arguing that the subterranean fauna identified at Yeelirrie may exist elsewhere and suggested that similar types of species (surrogates) were found elsewhere and so it was possible that the species only found at Yeelirrie could survive in other environments. This line of argument sidelines evidence that subterranean fauna has evolved over millions of years in complete isolation and so there is a high level of endemism. This approach further seeks to use uncertainty as a driver for proceeding, rather than taking a precautionary approach.

In December 2016 the WA Appeals Convenor and the former state Environment Minister rejected Cameco's appeal. This decision was consistent with the EPA's finding that if the project were to proceed there was a high probability that a number of subterranean fauna species – including multiple stygofauna species and one troglofaunal species - would be made extinct, along with an endemic salt bush.

The former WA Environment Minister, Albert Jacobs, released a report detailing his response to the appeals. In this report the former Minister conceded that both the EPA and the Appeals Convenors findings were correct in relation to the evidence suggesting extinction was likely. Despite this clear and verified finding that the Yeelirrie uranium mine would likely cause the extinction of multiple species the Environment Minister approved the Yeelirrie uranium mine anyway. It is a fundamental failure in the WA environmental laws that a Minister can make a decision that is contrary to the findings of the WA EPA and the outcome of an Appeals process and which is inconsistent with the object and principles of the Environmental Protection Act.

The decision was made on the 20<sup>th</sup> of January 2017, just weeks before the State election, at which point it was apparent the Barnett Government would struggle to retain power. The WA Labor party has an anti-uranium mining position and so the approval of the Yeelirrie uranium mine and two other uranium mines in WA, was widely regarded as a fast-tracked political decision to protect the mining companies interests against a change in government. Indeed

when WA Labor was elected one of their first actions was to reintroduce the ban on uranium mining. The approval of the Yeelirrie uranium mine was prioritised above the overwhelming evidence and consensus that the project threatens multiple extinctions.

The Conservation Council of WA (CCWA) and three Tjiwarl Native Title holders launched a judicial review in the WA Supreme Court in July 2017. After the Court dismissed the case CCWA and the three Tjiwarl Native Title holders took the case to the WA Supreme Court of Appeals. In July 2019 the Supreme Court of Appeals dismissed the case but highlighted the significance of the case in testing a grey area of the law. The decision confirmed that under WA state laws it is admissible for a Minister to approve a project that would knowingly cause the extinction of multiple species. This is a dangerous precedent and shows significant deficiencies in WA's environment laws which limits the Courts to consider only administrative errors, not whether a decision was a good or correct decision to make.

In the EPBC Review discussion paper it is asked, "Should the EPBC Act be amended to enable broader accreditation of state and territory, local and other processes?" The Yeelirrie case study should be a catalyst for environmental law reform and should initiate a review of the accreditation of WA's environmental assessment processes and laws through the EPBC bilateral agreement. It raises questions about how laws are accredited separately to processes. The processes are inconsequential if the laws fail to deliver the objects and principles of the Act and a broader accreditation of the laws and political processes is required as well as consideration to how political ideology can influence those decisions.

### *Federal Process*

Before the court proceedings had concluded (July 2019) the former Commonwealth Minister for Environment Melissa Price, granted federal approval for the Yeelirrie project. This decision has several implications. In the first instance the decision was made on 10 April 2019 on the eve of the care-taker period preceding the 2019 Federal election and was not made public until the eve of ANZAC day public holiday. The documents outlining the decision were not released until weeks later raising questions about whether the decision was in fact final and complete before the caretaker period. Redacted information through Freedom of Information (Fol) documents raises further concerns about the actual date of the decision and necessary documentation (See Appendix 2 – 4).

The federal decision was also influenced by significant lobbying from the proponent, evident through documents released through Senate Estimates<sup>103</sup>,<sup>104</sup> and Fol requests (see Appendix 1 – 3). These documents reveal that the proponent concedes they will never be able to prove that the project would not cause extinction. Information released through Senate Estimates and Fol requests also demonstrates that there was an informal and opaque process in which the proposed conditions for the mine were given to the proponent for them to argue against, a process no other stakeholders were afforded access to.

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<sup>103</sup> Environment and Communications Legislation Committee (2017) Hansard – Senate Estimates Hearing, Environment and Energy Portfolio, Climate Change Authority 22nd May 2017

<sup>104</sup> Senate Environment and Communications Legislation Committee (2018) Hansard - Senate Estimates Hearing Monday 26th February 2018 – Pg 88 – 90.

The federal Department prepared two sets of conditions for the project. The Department, reflecting that all the mitigation strategies proposed by the company would still result in the risk of extinction, advised the Minister to adopt conditions which would have required that the proponent “demonstrate that no species would be made extinct by implementation of the project prior to commencement of the project.” The Minister, against the advice of her department, did not set any requirements for the proponent to prove extinction of stygofauna species would not occur. Instead the Minister set prescriptive mitigation strategies which the Department had advised would not eliminate the threat of extinction (see Appendix 2 pg.26 points 57, 58 & 59).

The proponent argued against the condition to provide evidence the project would not result in extinction by saying that the condition “is probably unachievable and unrealistic, given the uncertainty surrounding sampling and naming of subterranean fauna” (see Appendix 3 pg.67). This reasoning is directly inconsistent with the EPBC Act 1999 object 3A(b) “if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation”. In this case the measure to prevent environmental degradation would be to not approve and/or to set conditions that require evidence and scientific certainty.

The federal decision also came after a public commitment by former Minister Price that she would wait until the outcome of the Supreme Court of Appeal proceedings before making any such decision. Much like the state Ministerial approval, the federal decision is widely seen as an expedited political process to protect against a change in government where the incoming government may make a different decision.

Through FoI documents (see Appendix 4) it has also been revealed that throughout 2018 Cameco began lobbying the then federal Minister for Resources, Matthew Canavan who in turn began lobbying former federal Environment Minister Josh Frydenberg. Minister Canavan met with Simon Williamson from Cameco on the 14<sup>th</sup> of June at federal Liberal MP Rick Wilson’s office in Kalgoorlie. Following this meeting Minister Canavan wrote to Josh Frydenberg saying that “given the significant delays already experienced by Cameco in relation to Yeelirrie, I would appreciate the Department of the Environment and Energy completing its processes expeditiously and I look forward to reviewing your proposed decision on the project shortly. Thank you for ensuring progress of the Commonwealth environmental approval for this project.”

There is clear intent and pressure here to expedite the process, despite the ongoing Court proceedings. Minister Canavan’s letter seeks to influence the proposed decision through asking to review a draft, and to ensure that the outcome of the process should be an approval for the project. This level of political influence, following direct lobbying from the company, seeking to directly influence both the speed and outcome of the assessment process is unacceptable and inconsistent with realising best environmental outcomes.

The pressure, especially with regard to the 2019 federal election, suggests that the company was concerned that a change in government may have led to a rejection of the proposal or to stricter conditions being applied – possibly in line with recommendations from the then Department of Environment and Energy. Any decision not to approve the mine would have

been appropriate based on the evidence that the project would likely cause multiple extinctions and failed to meet a number of objects and principles of state and federal environment legislation.

### *Threatened species listings*

The 10 stygofauna species, 5 troglafauna species and two different populations of an endemic salt bush – *Atriplex Yeelirrie* – which have all been identified as being at risk of extinction are all newly discovered species. Our understanding is that the process for classifying a species as endangered the species must first be formally ‘described’ and then nominated to the Threatened Species Scientific Committee (TSSC).

The subterranean fauna species in question include: *Enchytraeidae* sp. Y5, *Enchytraeidae* sp. Y6, *Halicyclops* cf. *eberhardi* sp. B, *Novanitocrella* ‘araia’ sp. n., *Schizopera akolos*, *Schizopera emphysema*, *Schizopera* sp. 7439, *Philoscidae* sp. n. Y2, *Atopobathynella* sp. ‘line K’, *Enchytraeidae* sp. Y4 and *Kinnecaris* ‘lined’ sp. n., and one (1) troglafauna species - *Trichorhina* sp. n. F. The Yeelirrie Impact assessment report by Subterranean Ecology 2011 and the impact assessment report from Bennelongia 2015, as well as taxonomic publications Karanovic and Cooper 2011a, 2011b, 2012, Karanovic et al. 2014, and Baehr et al. 2012 provide substantial information about the species listed above. This information was submitted to both the WA and Commonwealth governments as part of the environmental assessment and later through Senate Estimates.

Through Senate Estimates questions by former Senator Scott Ludlam in 2017<sup>105</sup> and Senator Rachel Siewert in 2018<sup>106</sup> it became evident that there is no standard process for government agencies who become privy to information about newly identified species or their circumstance to advance the listing of those species as either threatened or endangered. In the case that a proponent discovers new species, as is the case at the Yeelirrie site, it is not in the interest of the proponent to have the species formally described or nominated to the TSSC and it is often beyond the skills or capabilities of third parties to advance. We strongly advocate that there be a process in which newly identified species, that are identified through environmental assessments of any kind, be subject to departmental process of formally describing species and referring them to the TSSC for consideration.

We simply cannot rely on third parties to advance the listing of species. The extinction rate of species in Australia is staggering, and it is likely that many more species that are yet to be identified have suffered this fate. We strongly urge the Review Committee to recommend the development of new processes for formally describing and listing species within the DAWE. Such processes may be activated by the Minister or Scientific and Heritage Committees and at the community’s request where there is the prospect of immediate and significant threats.

The Yeelirrie uranium mine assessment process is a very clear indication of how environmental laws are failing to deliver fair and transparent processes that properly uphold the objects and principles of environmental laws or protect species from extinction. The

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<sup>105</sup> Environment and Communications Legislation Committee (2017) Hansard – Senate Estimates Hearing, Environment and Energy Portfolio, Climate Change Authority 22nd May 2017

<sup>106</sup> Senate Environment and Communications Legislation Committee (2018) Hansard - Senate Estimates Hearing Monday 26th February 2018 – Pg 88 – 90.

decision at a state and federal level to approve a mine which the overwhelming evidence indicates will cause extinction, which expert government agencies recommended against and the proponent admitted they could not prove otherwise, demonstrates a deep divide in what our laws call for and what our decision makers do. Under existing bilateral agreements, the processes and laws are accredited but not the independence of the decision makers or other legal instruments that can sideline or override these laws and processes. We need stronger requirements on evidence and the distancing of political influence in decision making, this could be achieved through the establishment of an independent EPA.

## 6. Concluding Comments

Thankyou, for the opportunity to comment on the Productivity Commissions draft report on Resource Sector Regulation. Again, we would like to reiterate the importance of considering resource sector regulation in the context of its impacts on communities, environment and the climate. We acknowledge that there will be significant pressure on the government from the resource sector to remove regulatory burdens to help establish new mines as part of a push for jobs and growth in response to economic impact of the COVID 19 pandemic.

Only time will tell what the long-term impacts of the pandemic will be on the mining sector and resource prices. In the short term we should not compromise the protection of our environment or communities to support an industry which is underpinned by uncertainty and has too often broken promises and failed to deliver on mine closure and commitments to communities.

If the commission has any questions about the submission, please contact Mia Pepper [mia.pepper@protonmail.com](mailto:mia.pepper@protonmail.com)