



# AUSTRALIAN CONSERVATION FOUNDATION

## Half-lives and Half-truths: The Australian experience with uranium mining

A submission by the Australian Conservation Foundation to the Quebec Office of Environmental Public Hearings (BAPE) on the issues of the uranium industry.

October 2014

Australia is home to around 35% of the world's uranium reserves and is a significant producer.

Many civil society groups in Australia have deep concerns over the impacts of uranium mining as radiation is dangerous and human exposure to it should be minimized, there is no net benefit from nuclear technology and Indigenous land and people are especially impacted by the nuclear industry.

The Australian Conservation Foundation (ACF) is Australia's leading national environmental civil society organisation and is committed to inspiring people to achieve a healthy environment for all Australians. For nearly fifty years we have been a strong voice for the environment, promoting solutions through research, consultation, education and partnerships. We work with the community, business and government to protect, restore and sustain our environment.

We welcome this chance to share our experience in order to contribute to your deliberations over uranium mining in Canada. Our key concerns include:

- The uranium sector remains controversial and contested. It is characterised by underperformance and regular non-compliance and is in urgent need of regulatory reform.
- Unresolved concerns over site specific contamination, tailings management, radioactive waste and nuclear proliferation mean that the Australian uranium sector fails any measured sustainability assessment.
- Systemic Aboriginal disadvantage has not been addressed by mining operations and most mining agreements have failed to deliver lasting benefits to Indigenous communities. A dedicated Inquiry should examine and address this continuing failure.
- Indigenous peoples ability to exercise full, free, prior and informed consent and effective input into the activities of mining operations on their traditional lands is compromised by severe capacity and procedural constraints. The legal and approvals framework should be changed to address this power imbalance.

- The Australian experience has been one of poor industry performance and culture and safety and regulatory deficiencies. All the uranium operations in Australia have serious and unresolved problems with waste and water management.
- Australian uranium directly fuelled Fukushima: there can be no 'business as usual' in the shadow of the continuing Fukushima nuclear crisis.
- There is a history of sub-standard mine rehabilitation in the Australian uranium sector and an urgent need to address the long-term impacts of the Australian uranium sector in a way that does not allow cost shifting from mining companies to the public purse.

ACF has a long and continuing interest and active engagement with the uranium sector in the throughout Australia and liaises with partner groups internationally.

ACF believes the uranium industry is unsustainable and provides no net benefit. ACF notes the unresolved concerns raised about the performance of the Australian uranium industry by a 2003 Senate Inquiry which found the sector characterised by a pattern of underperformance and non-compliance, an absence of reliable data to measure the extent of contamination or its impact on the environment, an operational culture that gives greater weight to short term considerations than long term environmental protection and which concluded that changes were necessary in order to protect the environment and its inhabitants from 'serious or irreversible damage.'<sup>1</sup>

Uranium is the principal material required for nuclear weapons. Successive Australian governments have attempted to maintain a distinction between civil and military end uses of Australian uranium exports, however this distinction is more psychological than real. No amount of safeguards can absolutely guarantee Australian – or any - uranium is used solely for peaceful purposes.

The former US Vice-President Al Gore has stated that "in the eight years I served in the White House, every weapons proliferation issue we faced was linked with a civilian reactor program." Despite Government assurances the fact remains that exporting uranium for use in nuclear power programs to nuclear weapons states enables other uranium supplies to be used for nuclear weapons programs. In reality, the primary difference between a civilian and military nuclear program is one of intent.

Despite industry claims nuclear power is no solution to the problem of climate change as it is too slow, risky and costly.

Uranium mining is always controversial. Uranium is not like other minerals - it has unique special properties and risks and it needs special laws and regulations because it gives off dangerous radiation.

Uranium mining always attracts attention and protests because it is the starting point of nuclear power and nuclear weapons, becomes long lived radioactive waste and uses and abuses large amounts of precious water.

The Australian experience has been one of poor industry performance and culture and safety and regulatory deficiencies. All the uranium operations in Australia have serious and unresolved problems with waste and water management.

---

<sup>1</sup>Senate ECITA Committee: Regulating the Ranger, Jabiluka, Beverley and Honeymoon uranium mines, October 2003, p. iv.

There is a long history of resistance and community, Indigenous and civil society opposition to uranium mining in Australia. Sometimes this has seen major victories like the efforts of the Mirarr people in Kakadu to halt the Jabiluka mine and of Djok elder Jeffrey Lee to protect his traditional land at Koongarra from the threat of mining.

The nuclear free struggle in Australia is a tough and continuing one but it has had much success in delaying and sometimes derailing unpopular projects. The uranium sector remains contested, controversial and without broad social license as routinely reflected in market reports, "Community opposition to uranium mining is strong...and...Australia's role in the nuclear fuel cycle more generally has met stiff community resistance" IBIS World Industry Report, May 2011.

Uranium exploration is the first step of the industry and uses different techniques from non-intrusive desktop or aerial work to extensive drilling. Exploration poses threats to country through access limitations, boreholes, scattered core samples, dust, weed invasion, increased fire risk, chemical or fuel spills and risk of damage to cultural sites and values.

If the exploration is successful, then the door opens for uranium mining and the nuclear chain starts.

Many of the impacts of uranium mining are similar to other extractive industries, including: social displacement, community marginalisation/re-location, vegetation clearance, dust, disturbance, erosion, overuse or degradation of water resources, chemical and fuel spills, waste and pollution and limits on land access and traditional practise.

Some of uranium's impacts are particularly related to this mineral. Radiation exposure to workers, local communities and the environment is a significant hazard because we cannot see, taste, smell or see radiation – it is a secret but permanent danger.

Uranium mining also generates large volumes of radioactive mine tailings – before mining the uranium was effectively stable and confined but after mining and processing the radioactive tailings are long lived, mobile and very difficult to manage. They routinely move in wind and water.

There are three main uranium mining methods - open cut mining, underground mining or In-Situ Leach (ISL) or solution mining where acid is directly injected into an ore-body to dissolve it underground before it is pumped to the surface for processing. ISL mining routinely discharge heavy metals, acid and radionuclides to the local aquifer

Australia has experience with commercial mining operations using all three methods, and all have resulted in significant and adverse impact.

The most recent independent assessment of the Australian uranium industry – a Senate Inquiry in 2003 – found the sector characterised by underperformance and non-compliance, an absence of reliable data to measure contamination or its impact on the environment and an operational culture focussed on short term considerations.

Uranium mining is a thirsty and dirty industry that consumes and contaminates large volumes of water.

After mining comes the closure and rehabilitation stage. This is a complex and costly process that has a poor track record with no good examples in Australia and very few internationally.

The clean-up of former uranium mines is often under planned and under-funded and many companies have limited capacity, commitment and accountability. Often regulators can lack both the capacity and culture to demand a comprehensive clean up and the Australian experience is that country is never properly cleaned up to the pre-mining standard.

Australian uranium directly fuelled Fukushima: "We can confirm that Australian obligated nuclear material was at the Fukushima Daiichi site and in each of the reactors...." (Dr Robert Floyd, d/g Australian Safeguards and Nuclear Safety Organisation)

Despite repeat civil society and wider calls – including by UN Secretary General – there have been no reviews and no operational changes: instead we have seen government and industry denial and business as usual.

The Australian uranium industry has been hard hit by the market fallout from Fukushima with falls of over fifty per cent in the uranium price and even bigger drops in the share value of uranium companies. Many new uranium projects halted or delayed and there are strong financial constraints on new projects.

The industry has been cutting costs and cutting corners and increasingly trying to shift operations to areas of low cost and governance, with junior Australian companies now active in Africa.

There is a significant gap between the promises and the performance of the uranium sector. In the 10 years to 2011, uranium accounted for only 0.29 per cent of Australian export revenue and less than 0.015 per cent of national jobs. It remains a high risk-low return industry where the economic and employment benefits are routinely exaggerated while the risks are downplayed.

Australia is a rich nation with reasonably robust laws, civil society groups, an independent media and judiciary and dedicated industry checks and balances. Despite this the Australian experience with uranium mining has been one of environmental damage, deep community concern, ineffectual regulation and deficient industry performance. We understand that much of this experience has been comparable in Canada.

This experience should sound alarm bells for communities and the environment in our two countries.

In Australia mining is increasingly being promoted as a silver bullet to address systemic Indigenous disadvantage. Those who promote this view are often passionate and powerful in their documentation of this disadvantage but to not hold federal, state and territory governments to account for failing to address this only increases the likelihood that they never will. Access to quality medical care and educational and economic opportunity is a fundamental citizenship entitlement. To link such to approval for mineral development or industrial access to traditional lands cements a profound political and public policy failure and also consigns Indigenous peoples in regions without mineral resources to perpetual marginalisation.

The Australian experience has seen most mining agreements continue to fail to deliver benefits to Aboriginal landowners. According to the Native Title Working Group Report, obstacles frequently get in the way of successful agreements for Indigenous communities with mining companies. "There are *only a limited number of good agreements* to provide models...The reasons for the absence of more agreements containing substantial financial and other benefits for traditional owners after almost 15

years of the operation of the *Native Title Act 1993* (NTA) is, in itself, deserving of inquiry.” (Native Title Payments Working Group report, December 2008) ACF strongly supports this call for a dedicated Inquiry into the continuing failure of mining and resource agreements and operations to provide significant and on-going benefit to Aboriginal communities, organisations and representative bodies.

Mining can bring economic benefits - it also can bring profound community dislocation and division and it will bring adverse environmental impact and degradation

Systemic Aboriginal disadvantage has not been addressed by mining operations and most mining agreements have failed to deliver lasting benefits to Indigenous communities. There is a lack of detailed and verified information on the highly promoted claims of economic and employment benefits arising from mining operations and mining sector initiatives.

Indigenous peoples ability to exercise full, free, prior and informed consent and effective input into the activities of mining operations on their traditional lands is compromised by severe capacity and procedural constraints. The legal and approvals framework should be changed to address this power imbalance.

In many instances Indigenous communities have insufficient specialised administrative, information gathering or enforcement functions. In Australia Land Councils often have limited financial and commercial capacities and their lawyers lack the power of multinational corporation’s legal representatives. Many developing countries find it exceptionally difficult to administer and enforce mining arrangements, let alone individual Indigenous groups.

There is a history of sub-standard mine rehabilitation in the Australian uranium sector and an urgent need to address the long-term impacts of the Australian uranium sector in a way that does not allow cost shifting from mining companies to the public purse.

The inequity found in the relationship between mining companies and Indigenous communities is further compounded by the limited rights afforded to Aboriginal people in relation to developments on their traditional lands and estate. The legal framework that applies to mining and native title legal framework that applies to mining and native title severely disadvantages indigenous landowners.

According to prominent Aboriginal lawyer Noel Pearson:

*“You might as well make clear in the law that the tribunal can only determine beads and mirrors as acceptable outcomes from arbitration, because that is in effect what it has been doing.*

*The mining lobby has been quiet on land rights for the past decade. Having secured an advantageous legal framework through the bitter conflicts over the Native Title Act in the '90s, they have learned that ideological opposition to land rights is unproductive for its members.*

*As long as member companies are winning hands-down through the so-called agreement-making process, they have had no interest in conflict”.*

(Noel Pearson, ‘Boom or dust lifestyle’, *The Australian*, 16 December 2008)

The Australian mining industry is increasingly promoting and adopting profit (rather than volume) based royalty arrangements with Traditional Owners. Whilst a profit-based royalty regime is

advantageous and provides enhanced flexibility for industry, it fails to provide a certain, secure and assured revenue platform for individual Indigenous communities. Detailed research by the University of Queensland has found more than half the Indigenous land-use agreements, "were either basket cases that should never of been entered into, or delivered few cultural and monetary benefits."

In closing this submission there is much wisdom in Yvonne Margarula's reflection on living with three decades of uranium mining on her country. Ms Margarula is the senior Traditional Owner of the Mirarr people of Kakadu - the Aboriginal people with the longest lived experience of uranium mining in Australia.

Her words should be considered by all communities facing the threat of this industry: *"None of the promises last, but the problems always do."*

ACF welcomes the opportunity to share these reflections and wishes you well in your deliberations. We urge you to maintain a moratorium on the mining and processing of uranium in Quebec and would be happy to provide any further information or clarification that may be of use in your deliberations - please contact Dave Sweeney on [d.sweeney@acfonline.org.au](mailto:d.sweeney@acfonline.org.au) if required.

*End/Fin.*