

# OLYMPIC DAM MINE

Nuclear-Free Campaign – Friends of the Earth Australia  
www.nuclear.foe.org.au  
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BHP planned to supplement underground mining with a massive open-cut mine at Olympic Dam (a.k.a. Roxby Downs). Export of uranium was expected to increase from an average of 4,000 tonnes per year to 19,000 tonnes per year and the production of copper, gold and silver was also expected to increase.

The company was not required to study the viability of mining copper, gold and silver without also extracting and selling uranium – an option which would allow for ongoing, profitable mining while addressing at least some of the major problems.

The planned expansion was cancelled in August 2012 with BHP citing economic factors including the weak uranium price following the March 2011 Fukushima disaster. Also in 2012, BHP disbanded its Uranium Division and it sold the Yeelirrie lease in WA for a small fraction of the nominal value of the uranium resource.

The existing underground mine at Olympic Dam continues to operate, producing 10 million tonnes of radioactive tailings waste annually, consuming around 37 million litres of Great Artesian Basin water every day, and contributing to the global problems of nuclear waste and weapons proliferation risks. BHP is also investigating options for heap leach uranium mining.

## Radioactive Racism

The Olympic Dam mine operates under the Roxby Downs Indenture Act, which provides exemptions from the SA Aboriginal Heritage Act (AHA). To be precise, Olympic Dam does not have to comply with the AHA 1988 but must partially comply with the AHA 1979 ... even though the 1979 law was never proclaimed. BHP is in a legal position to determine what consultation occurs with Traditional Owners, who is consulted, and nature of any consultation. The company decides the level of protection that Aboriginal heritage sites receive and which sites are recognised. BHP claims that it fully complies with Aboriginal heritage legislation – if so, why is it

unwilling to relinquish the legal exemptions?

It is ironic and hypocritical that BHP supports Reconciliation Australia's 'good governance' program and has provided over \$2 million to Reconciliation Australia, yet will not relinquish its exemptions from the Aboriginal Heritage Act. The Roxby Downs Indenture Act was amended in 2011. When asked why the amended legislation retains exemptions from the SA Aboriginal Heritage Act, a government spokesperson said: "BHP were satisfied with the current arrangements and insisted on the continuation of these arrangements, and the government did not consult further than that."

The Roxby Downs Indenture Act also allows wide-ranging and indefensible exemptions from key environmental laws such as the SA Environmental Protection Act 1993, Freedom of Information Act 1991, and Natural Resources Act 2004.

One notorious incident in the history of the Olympic Dam mine concerned the laying of a water pipeline on the land of Arabunna Traditional Owners in the mid-1990s, when WMC Resources owned the mine. The dispute over the pipeline led to violence, terrorism, imprisonment, and the accidental death of one person.

Jan Whyte and Ila Marks summarised the controversy in the July 1996 edition of the Friends of the Earth magazine, Chain Reaction: *"One method used by mining companies to side-step proper consultation processes is documented in North America and Canada as well as Australia. Mining companies incorporate small Aboriginal groups in areas under dispute and give them financial support. These groups are then regarded as the official representatives for that area and mining companies proceed to consult with them. Thus, it seems as if the companies are going through the correct legal processes whereas, in fact, they are ignoring parties who have legitimate interests."*

## Weapons

BHP sells uranium to nuclear weapons states, states refusing to ratify the Comprehensive Test Ban Treaty, states blocking progress on a Fissile Material Cut-Off Treaty, states with a history of secret nuclear weapons research, and states stockpiling 'civil' plutonium.

A new law was set in 2006 when the federal government, with BHP's support, negotiated a uranium export agreement with the secretive, repressive, militaristic, undemocratic regime in China. Then another new law was set with the agreement to export to Russia with very few if any safeguards inspections.

## Radioactive Waste

Over 150 million tonnes of low-level radioactive tailings waste have been produced, increasing at 10 million tonnes annually. Under the expansion plan, the production of tailings would have increased to 68 million tonnes annually.

The tailings contain a toxic, acidic soup of radionuclides and heavy metals. There have been numerous spills and leaks – e.g. in the mid-1990s it was revealed that about three billion litres had seeped from the tailings dams over two years.

Mining consultants Advanced Geomechanics noted in a 2004 report that radioactive slurry was deposited "partially off" a lined area of a storage pond at Olympic Dam, contributing to greater seepage and rising ground water levels; that there is no agreed, accurate formula to determine the rate of evaporation of tailings and how much leaks into the ground; and that cells within a tailings pond covered an area more than three times greater than recommended, requiring "urgent remedial measures".

Photos taken by an Olympic Dam mine worker in December 2008 showed radioactive tailings liquid leaking from the so-called rock 'armoury' of the so-called tailings 'retention' system. BHP's response was to threaten 'disciplinary action' against any mine worker caught taking photos of the mine site. BHP claimed that the "allegations" related to a single incident when a small damp patch appeared on the wall of the tailings retention system. In fact, the photos clearly showed multiple leaks, and the leaks were ongoing for months.

## Water consumption

The mine uses about 37 million litres of Great Artesian Basin water every day. The water take from the Great Artesian Basin has had adverse impacts on the precious Mound Springs.

Under the expansion plan, BHP proposed an increase in water consumption from 37 million litres daily to over 250 million litres daily (up to 42 million litres from the Great Artesian Basin, the remainder from a proposed desalination plant at Point Lowly, near Whyalla).

## OH&S

In 2010, a worker was sufficiently concerned about occupational health issues at Olympic Dam that he leaked information to the media. The leaked documents show that BHP uses manipulated averages and distorted sampling to ensure its figures of worker radiation exposure slip under the maximum exposure levels set by government.

The risks would escalate if plans for a massive expansion of the mine are revived. The BHP whistleblower said. "Assertions of safety of workers made by BHP are not credible because they rely on assumptions rather than, for example, blood sampling and, crucially, an assumption that all workers wear a respirator when exposed to highly radioactive polonium dust in the smelter."

In 2013, a Freedom of Information application revealed that the radiation plans for Olympic Dam were more than 15 years out of date. Between 2003 and 2012, BHP reported 31 radiation leaks at the mine. The Environment Protection Authority could only find plans from 1997 and 1998 and stated: "We acknowledge that an update is overdue and action is being taken to address this situation". The EPA searched its records for 10 months before responding that there was no up-to-date plan and it needed a new one. Greens MLA Mark Parnell said: "All these plans should be available in the public realm and not have to be chased using FOI application."

## More information:

[www.nuclear.foe.org.au/uranium/#sa](http://www.nuclear.foe.org.au/uranium/#sa)  
or  
[www.nuclear.foe.org.au/olympic-dam-uranium-copper-mine](http://www.nuclear.foe.org.au/olympic-dam-uranium-copper-mine)