

## ECNT submission to Federal uranium inquiry

### (Part 1) – 24/10/05

- The Commonwealth has said it intends taking over the approval of new uranium mines in the NT.
- However, the Commonwealth has shown over many decades that it cannot be trusted with uranium mines in the NT.
- From Rum Jungle to Ranger, Koongarra to Jabiluka, the Commonwealth has always put commercial gain and perceived political and strategic interests ahead of the environment, Indigenous people, public health and safety, and future generations.

### RUM JUNGLE

- Long term pollution and environmental degradation from the Rum Jungle uranium mine established by the Commonwealth through the Australian Atomic Energy Commission. (Commenced 1954).
- Despite reports as early as 1960 that the mine was releasing large amounts of toxic heavy metals and other pollutants causing tree deaths and fish kills along the Finnis River, no effective action was taken by the Commonwealth or the mining company to clean up the mine.
- As a result, thousands of tonnes of potentially toxic pollutants such as copper, zinc, manganese, lead, sulfate and uranium, as well as radium, were, and continue to be, washed into the Finnis River and adjacent wetland environments.
- A Senate inquiry in 1970 said that *“One of the major pollution problems in the NT is that caused by copper and uranium mining at Rum Jungle...[mine pollution] has made the Finnis River unsuitable for stock or human consumption for a distance of 20*

*miles. Vegetation on the river banks has been destroyed and it will be many years before this area can sustain growth.”*

- Even after the mine eventually closed in 1971, and in all the years since, no effective action has been taken to stop pollution from this mine from continuing to discharge into the Finnis River.
- Rehabilitation projects in the 1980’s have reduced the rate of pollution, but this is likely to be only temporary, especially if, as the Commonwealth desires, a new uranium and base metals mine is opened at Rum Jungle in the next few years.

### RANGER

- Like Rum Jungle, Ranger demonstrates that the Commonwealth is not fit to approve, manage or regulate uranium mines in the NT.
- The Ranger mine was established by the Commonwealth in 1979, against the wishes of the areas Traditional Owners. Since then the Commonwealth and NT governments have been responsible for the regulation of the mine through a confused tangle of legislation, inter-governmental agreements and bureaucratic processes.
- As documented in the submission to the Inquiry from the Gundjeihmi Aboriginal Corporation, the Ranger uranium mine has been and remains to this day a regulatory mess which has marginalised the local Aboriginal people and contributed to the long-running mismanagement of the mine.
- This mismanagement has resulted in over two hundred documented leaks, accidents and breaches, as well as chronic problems with such things as mine water management.
- Studies show that the mine has caused and continues to cause impacts on the environment, most notably

the elevated levels of a number of potentially toxic contaminants downstream of the mine (e.g. 2-300% increase in magnesium and sulfate levels).

- In addition to the surface water pollution caused by Ranger, there are grave concerns about groundwater pollution arising from the leaking tailings dam.
- As a result of the leaking tailings dam, a contaminated groundwater plume has developed which contains elevated levels of heavy metals, saline water and radionuclides.
- This plume is a significant legacy of the mine and at some stage could move off the mine site and contaminate the surrounding Kakadu National Park and World Heritage Area.
- Despite longstanding concerns over ongoing pollution and water management problems at the mine, it was not until this year – 26 years after the mine commenced - that a waste water treatment plant was approved for the mine.
- Just what the long term effects on ecosystems and people will be from the Ranger mine will take some time to become clear, given the lack of high quality benchmark studies conducted prior to the opening of the mine, and the fact that the mine tailings at Ranger will remain radioactive for tens of thousands of years.
- In addition to the environmental impacts of poor water and pollution management at Ranger, there have been many accidents that have impacted on workers at the mine.
- Most recently the Ranger mine operator, RioTinto subsidiary ERA, was successfully prosecuted in the Darwin Magistrates Court for the so-called potable water incident at Ranger last year, when dozens of mine workers drank or showered in water contaminated with uranium at levels 400 times the recommended maximum level for drinking.

- In its '*Precis of Facts*' submitted to the Court, the NT Government states:

However, in the course of its investigation the Office of the Supervising Scientist also concluded that the underlying cause [of the contamination] was the poor condition of the process water distribution system at Ranger. As part of the OSS investigation, the OSS undertook a general inspection of the Mill. The poor condition of the process water system and associated infrastructure was immediately obvious upon entering those areas. Leaking pipes were common. The FOB Scrubber itself had a significant process water leak. The valve handle on the potable water hose point was broken and corroded to the extent that one needed to hit it with a brick to open or close it. What appeared to be a temporary hose connection, that was leaking quite significantly, was observed in the Grinding Building. The colour of some pipes, necessary to identify what they contain, was very difficult to determine due to a build up of rust and grime on them. It was the opinion of the Supervising Scientist that a major refurbishment of the process water system was required to bring it up to a satisfactory standard.

- Despite the mine's poor record and findings like this, the Commonwealth, apart from some band aid measures, continues to largely ignore its responsibilities in relation to the regulation of Ranger uranium mine.
- The Commonwealth continues to ignore the clear and strong findings and recommendations of the 2003 Senate Inquiry into Ranger, again showing that it is not interested in protecting the environment, workers or the community in relation to uranium mines in the NT.

## **KOONGARRA**

In relation to the proposed new uranium mine at Koongarra in Kakadu, in 1999 the Commonwealth said it supported a recommendation from the World Heritage Bureau to commence negotiations with the Traditional Owners with a view to incorporating the proposed mine area into Kakadu National Park. Once again, years later, this still has not been done, meaning this outstanding natural and cultural

environment remains exposed to the threat of uranium mining by a French government owned corporation - Areva.

## CONCLUSION

**The Federal government has seen fit to override the Territory public and democratic processes and announce that it is taking over the approval of new uranium mines in the NT. Not only does the Commonwealth lack the legislation necessary to open any new uranium mines in the NT, over the past 50 years it has shown by its record of irresponsibility, negligence and bad faith that it is not fit to approve or regulate any new uranium mines in the NT.**

### (Part 2).

The Environment Centre NT would like to take this opportunity to present the Committee with a challenge. We ask that the Committee puts forward a recommendation in its final report that the enormous amount of Commonwealth effort that is currently going into promoting and subsidising the nuclear and fossil fuel industries in Australia be similarly put into the promotion and support of the renewable energy and energy efficiency sectors. Until these alternative options have been given a fair hearing, the expansion of the uranium sector, either via the opening of new mines or the expansion of existing ones, should not be contemplated.

It would, in our view, be negligent of the Committee to endorse an expansion of uranium exports to, say, China, without conducting a thorough examination of the opportunities for, and benefits of, renewable energy technologies and energy efficiency measures, both here in Australia and overseas. Indeed we would go further and encourage the Committee to recommend the redirection of

Commonwealth funding currently aimed at facilitating the expansion of the coal and uranium sectors towards the renewables sector as well as into reducing baseload electricity demand. Only then, when the alternatives have been given a fair go as well as a fair hearing, will Australians really be able to see how well they stack up.

At present, it has been calculated by the Institute of Sustainable Futures that the fossil fuel industry as a whole in Australia benefits from subsidies worth \$8.9 billion every year. Meanwhile, the Commonwealth Government committed at the 2004 election to just \$300 million of funding for renewable energy, whilst the MRET target has remained at a paltry 2 percent. Elsewhere, as Professor Ian Lowe pointed out at a recent speech to the National Press Club, the nuclear industry has received massive government subsidies. During the first 15 years of development in the US, nuclear received subsidies amounting to \$15.30 per kwh, whilst during its first 15 years the wind industry received just 46 cents per kwh. These huge imbalances towards dangerous, polluting and greenhouse intensive fuels needs to be urgently addressed.

There are numerous studies that have been conducted in Australia and overseas demonstrating that renewables and energy efficiency are the more sensible energy options to pursue, rather than nuclear, coal, oil and to some extent gas. The Australia Institute study in 2002, for instance, mapped out how a 60% reduction in GHG emissions could be achieved in Australia by 2050 through a mix of photovoltaic, wind, cogeneration from biomass, hydroelectricity and energy efficiency measures. Australia could get 10% of its electricity from wind without major modifications to the electricity grid.

We might add that China too, whilst currently building new nuclear power stations, is even more aggressively pursuing the renewables option, legislating earlier this year that 10%

of its energy consumption must derive from renewable sources by 2020 – that’s twice as much energy from wind and solar as it is from nuclear. Instead of encouraging China to expand its nuclear and coal-fired generation, Australia could be latching on to the renewables expansion and exporting wind turbines, solar panels and expertise. Sadly we are getting left behind in that field.

Energy efficiency measures to reduce baseload demand, particularly the peaks caused by excessive use of air-conditioners, should also be adopted with much greater vigour. The Australian Ministerial Council on Energy has identified that energy consumption in the manufacturing, commercial and residential sectors could be reduced by 20-30% with the adoption of current commercially available technologies. The Cool Communities program has consistently shown that, with little more than the provision of good advice, households here in Darwin and in Alice Springs can easily reduce their greenhouse emissions by 1.5 – 2 tonnes per year. The Environment Centre NT has been proud to be associated with this program since its inception in 2001. Cool Communities was federally funded up until last year when the program was discontinued. It is now up and running only in the Northern Territory, after the Territory Government stepped in with additional funding, under the new name of CoolMob.

**If this Committee is serious about reducing global greenhouse gas emissions, and we take from its previous statements that it is, then there are more immediate, cost-effective and environmentally and socially sustainable options that can be pursued, rather than wasting time, money and resources heading off towards the nuclear dead end.**

Finally, we would like to make a couple of observations about some of the CO<sub>2</sub> abatement figures that have been bandied about by advocates of the nuclear option. The methodologies

of Life-Cycle Analysis are still being vigorously debated in the scientific community. Whilst the IAEA study quoted by the Minister for Foreign Affairs, Alexander Downer, in his submission to this Committee, suggested carbon dioxide emissions from nuclear power are equivalent to wind and solar, other studies have estimated much higher life cycle emissions from nuclear generation. The Committee may also be aware of the late-nineties Oko-Institut study in Germany that showed that alternative energy sources were 3-4 times *less costly* as a means of reducing CO<sub>2</sub> than nuclear power.

We would like to close with a quote from the 2004 AMP Capital Investors Nuclear Fuel Cycle Position Paper:

*‘Nuclear power and the uranium industry are neither financially or environmentally sustainable. ... It is critical that the nuclear industry does not manipulate the climate change threat to divert government policy and finance away from the intrinsically safe renewable sources of electricity’.*

The Environment Centre NT can only wholeheartedly endorse this statement and we again challenge this Committee to give the renewable and energy efficiency options a fair go.