A RADIOACTIVE WASTE DUMP: YOUR QUESTIONS ANSWERED

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"THIS IS OUR OLD PEOPLE'S COUNTRY. WE WANT TO MAKE SURE THAT OUR COUNTRY DOESN'T BECOME POISONED....WE MUST PROTECT IT FOR THE CHILDREN"

NO RADIOACTIVE DUMP IN OUR COUNTRY

The Kupa Piti Kungka Tjuta represent the senior Aboriginal women from Kokatha, Arabunna, Antikarinya and Yan Kuntjatjara country.

A NATIONAL RADIOACTIVE WASTE DUMP IN SOUTH AUSTRALIA?

The Coalition government wants to open a radioactive waste dump that will take wastes from the whole country, in the arid rangelands of South Australia. The dump will threaten the health and environment of communities throughout the region for thousands of years. The proposal is an integral part of the massive expansion of the nuclear industry taking place in Australia. It is a cheap and quick way of putting "out of sight and out of mind" an intractable waste problem.

WHO'S BEHIND THE PROPOSAL?

The Department of Industry, Science and Resources (DISR) along with the Australian Nuclear Science and Technology Organisation (ANSTO) are the main Commonwealth agencies promoting the national repository.

ANSTO operates the research nuclear reactor at Lucas Heights in South Western Sydney. The reactor produces over 85% of Australia's nuclear wastes. These include over 1400 highly radioactive spent fuel rods. Most of these wastes are in interim storage on site. ANSTO also want a new nuclear reactor to take over from the old one. A new reactor will produce radioactive wastes for another 40 years.

ANSTO and the government tell us that the dump is for low-level waste and short-lived intermediate waste. This waste is a fraction of the total waste inventory and is produced by medical and experimental use in hospitals and research facilities. The real purpose of the dump is to bury the decommissioned nuclear reactor and high-level waste produced by the new reactor.

WHERE IS BILLA KALINA?

Billa Kalina is a 67,000 square kilometre region in South Australia named after one of the pastoral leases located in the region.

The region extends over the traditional country of the Kokatha people to the south and Arabunna people to the north. The Kupa Piti Kungka Tjuta, an organisation representing the senior Aboriginal women of Kokatha, Arabunna, Antikarinya and Yan Kuntjatjara have declared their opposition to the dump. Upon hearing of the plan, they issued a statement which asked:

"Are they trying to kill us?"

Despite the opposition of Aboriginal and environment organisations it is likely that the proposal will be given government approval. For this reason the Billa Kalina Alliance seeks your active support for the campaign. Only vigorous public opposition will prevent the further nuclearisation of Kokatha and Arabunna land

WHAT ARE THE FACTS ABOUT SHALLOW BURIAL?

The proposed dump will be about the size of a soccer field. The waste will be placed in trenches of less than 20 metres deep, probably inside steel drums. The drums are then covered with concrete or rammed earth. This disposal method is called Near Surface, or "shallow burial".

In 1995 the Senate Select Committee on the Dangers of Radioactive Waste conducted an inquiry into the production of radioactive materials and waste management practices. They recommended against "shallow burial" and that a national waste facility should be engineered for above ground storage. They also recommended that: "the national facility will be adequately engineered to withstand all possible climatic conditions, no matter how unlikely."

Yet, the Bureau of Resource Sciences openly states that the proposed design will not prevent leakage of water, nor human, animal or plant intrusion. Exact plans for the design are vague and will not be fully disclosed until after a site is selected.

The dump will be covered by an 'institutional control period' of 100 years. This means that the operating agency is responsible under law for this period of time. It is also claimed that the dump will have an 'engineering integrity' of 300 years. However, small quantities of Radium and other alpha-emitters typically found amongst low-level waste have half-lives that extend far beyond these periods. The half-life of Radium 226 is 1600 years, and gives rise to Radon, a gas, and its decay products which are the principle agents of lung cancer in uranium miners.

The fact that Radium decays into a toxic gas would require that the repository have the technical means to isolate radioactive vapours from the environment. Shallow burial will not provide for this in any way. Other likely wastes such as Americium 241 have a half-life of 432 years and decays into Neptunium 237, which has a half-life of over 2 million years again far exceeding control periods required under law.

CONTAMINATION OF GROUNDWATER

Despite the virtual absence of surface water, there are large reserves of groundwater in the SA desert region in the Great Artesian Basin (GAB). This water resource is critical for all human activity, as well as for the unique mound springs and most life in the area.

When the desert experiences an extreme climate event such as a flood, it is thought that these waters seep underground and renew ground water. This water may leach through a shallow buried nuclear dump and place a direct and measurable threat to water supply for thousands of years. If radionuclides leak from a proposed facility, it may lead to large tracts of groundwater being permanently contaminated. This presents a direct threat to the health of people that rely on groundwater for their daily needs.

MORE PROBLEMS

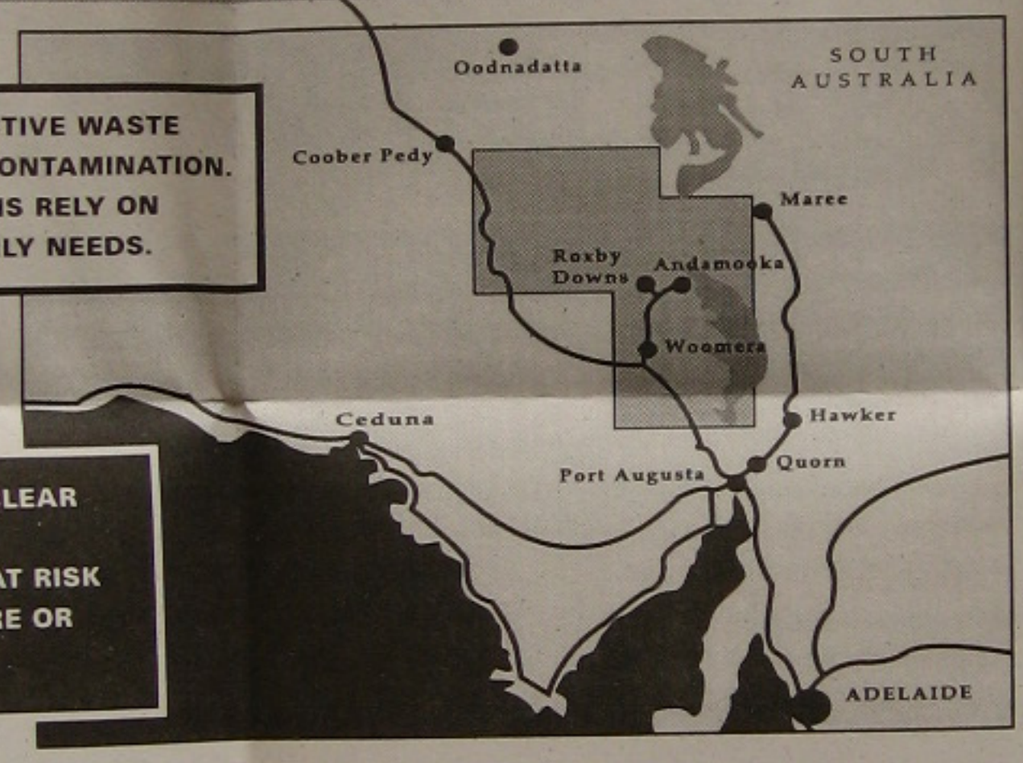
Siting the dump in a remote area only adds "the tyranny of distance" to an already complex problem of radioactive waste management. These difficulties include maintenance of:

- communications
- a high standard of available expertise
- services and,
- security

In addition, radioactive wastes would be transported across the continent putting numerous communities en route at risk to accidental exposure and contamination. All this adds to the human rights and environmental abuse that burial of radioactive waste on Aboriginal land entails. Remote dumping is an irresponsible abandonment of radioactive wastes.

Our community and country is just as important as theirs.

SHALLOW BURIAL OF RADIOACTIVE WASTE WILL CAUSE GROUNDWATER CONTAMINATION. COMMUNITIES IN ARID REGIONS RELY ON GROUNDWATER FOR THEIR DAILY NEEDS.



TRANSPORTATION OF NUCLEAR WASTES WILL PUT ALL COMMUNITIES ENROUTE AT RISK OF ACCIDENTAL EXPOSURE OR CONTAMINATION.

RADIOACTIVITY OUT OF CONTROL

AUSTRALIA: GLOBAL NUCLEAR WASTE DUMP?

In December 1998, a promotional video of US nuclear waste management corporation Pangea Resources Ltd was leaked to the media. The video enthuses about the potential Australia has for being the world's nuclear waste dump. The leak spawned a rash of commentary and an orchestrated public opinion campaign using high profile spokespeople to push Pangea's cause.

Significantly, the DISR has also indicated that the national radioactive waste dump may be privately controlled. Pangea Resources Ltd has expressed interest in operating the dump.

Pangea's plan for an international waste dump has met with a government rejection siting that it is contrary to policy. In reality the government has embarked on a massive expansion of the nuclear industry. In addition, last December the Australian Radiation Protection and Nuclear Safety Act (ARPANSA) was passed, providing a uniform Commonwealth legislation for radiation facilities. The Greens and Democrats proposed an amendment that would ban the importation of nuclear wastes. The amendment was refused. There remains no legislative barrier to the importation of radioactive wastes. Infrastructure developments such as the national dump will make any attempt to site the world's nuclear waste dump in Australia much easier.

WHAT SHOULD WE DO WITH OUR NUCLEAR WASTE?

It is not possible to "dispose" of radioactive waste: it does not "go away". Nuclear fission technology, the source of nuclear wastes must be phased out as the first stage of a comprehensive waste management strategy.

ALTERNATIVES TO NUCLEAR FISSION

Using an electro-magnetic source called Spallation cyclotron technology, all our isotope needs can be fulfilled without producing the large quantity of high-level radioactive wastes that nuclear fission does. Spallation technology is well advanced and is set to overtake nuclear fission as the primary source of medical isotopes. It is cleaner, cheaper and safer. There is a glut on the world market of radioisotopes and most countries import their supply for medical use. As part of a phase out strategy Australia could import medical isotopes, rather than spend an estimated $500 million on a new nuclear reactor.

ABOVE GROUND DRY STORAGE

The optimal waste management strategy is to store radioactive wastes in an above ground facility that can withstand all possible climatic conditions, at or near the site of production or use. The advantages of this strategy are:

- The waste can be seen. If it is buried it will be forgotten leading to contamination of people who accidentally breach the repository.
- The waste will be dry. If it is buried it will eventually contaminate groundwater, typically relied upon in arid regions for daily water needs.
- The waste is accessible. If it is buried leaked wastes and contaminated soils and water will be difficult to retrieve. Above ground storage will allow for access and regular monitoring. It will be possible to repackage the waste and place it in a new storage facility.
- Reduced risk of transport accidents and contamination. Remote burial means transportation across the continent and will put communities en route at risk of radioactive contamination or accidental exposure.
- Encouraging waste minimisation. Remote burial will foster an "out of sight, out of mind" disposal culture amongst users. On-site storage will encourage best practice waste minimisation strategies.
- It will be close to the experts. Remote burial makes it difficult for experts to monitor the site. To keep the waste safely isolated from the environment it is necessary for expert monitoring to be in effect for the duration of toxicity.
- It can be guarded for many generations. If the waste is accessible, secure and close to experts it can be guarded over the period of time it remains toxic. It is necessary to resource and foster a guardianship culture that extends into future generations to ensure that the waste is properly managed. The only way to do this is by above ground dry storage at or near the site of production and use.

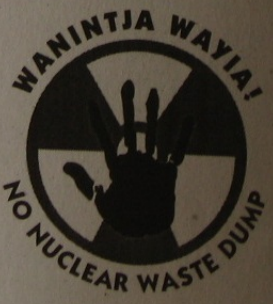
The nuclear industry has helped to perpetrate either directly or indirectly, acts of genocide upon Indigenous and non-indigenous people all over the world.

Australia is no exception.

Aboriginal land has been appropriated, cleared of it's inhabitants and ruthlessly exploited by the nuclear industry. This includes weapons testing, military and space experimentation and the mining and milling of uranium.

This is a problem for everyone! Aboriginal and non-aboriginal. We must all say NO to the waste dump. Please join us, the Arabunna, Kokatha, Antikarinya, Yan Kuntjatjara.

Speak up strongly!



WHAT YOU CAN DO!

☞ Write or Fax a letter. These do make a difference!

The Hon, John Howard, Prime Minister
ANZ McCaughan House
Level 9, 7 Phillip Street (GPO Box 36)
Sydney, NSW 2000.

The Hon, Robert Hill,
Minister for the Environment
Commonwealth Parliament Offices,
100 King William Street, Adelaide SA 5000.

And don't forget your own Federal MP.

☞ Write, Fax or Telephone

Pangea Resources Pty Ltd
Suite 11589 High Street, Kew VIC 3101
PH 03 9854 6121 FX 03 9854 6125
...and tell them you don't want Australia to be the world's radioactive waste dump.

☞ Write a letter

to your local newspaper or phone your opinion to the major papers or take part in radio talk back.

☞ Photocopy

and distribute this leaflet at work, school university. Put it on your notice board.

☞ Start a local group

on this issue in your local area. Contact FOE for details.

☞ Invite a speaker

to your workplace, community, club or union.

☞ Attend and support any rallies, meetings or events.

☞ MAKE A DONATION