

Janet Marsh

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Submission to the House of Representatives Standing Committee on Industry and Resources Inquiry into Australia's Uranium

URANIUM MINING

"We don't want uranium from our country hurting people in other countries" said aboriginals gathered at Alice Springs to discuss uranium mining in 1997.

There is a serious ethical question of whether the risks of uranium mining can be justified, and if so who will be responsible for the compensation of workers, their families, and members of the public affected by it.

The history of uranium mining is marked by a high incidence of lung cancer amongst miners, caused by unavoidable inhalation of radioactive radon gas, a highly radioactive gas given off by uranium deposits. There is no 'safe' dose of radon. Low dose ionizing radiation may well be the most single cause of cancer, birth defects and genetic disorders. There cannot be a 'safe' dose of radiation, there is no 'safe' threshold. Knowing this, then any permitted radiation is a permit to commit murder.

Miners are also exposed to increased whole body radiation from the ore itself, causing cancers, sterility, and the genetic mutations which are detrimental to the species and passed on to countless future generations.. The costs to present and future generations in pain and suffering, and costs to society in providing for the unfortunate victims of cancer and/or genetic disease are incalculable.

Uranium mining is more hazardous than most forms of mining. There are far greater threats to the health of workers in the industry and the general public, problems of compensation and long term health care for incapacitated workers and offspring with genetic disease.

URANIUM REFINING

Uranium milling, where uranium ore is crushed, ground, and dissolved in sulphuric acid, leaves behind many of its radioactive decay products as 'tailings', which remain radioactive for a predicted quarter of a million years. There are significant health hazards with radiation exposure to workers in transport, waterside, seamen, and the general public with uranium ore and yellowcake. Earth movements, cyclones and other natural disasters could damage tailings dam and allow radium to escape into the environment. Leaking water may contaminate ground water and nearby rivers as in Northern Territory. Radium is one of the most toxic substances known and a potent carcinogen.

ONCOLOGY THERAPY

Cancer patients have been treated for decades with combinations of pharmaceuticals and radiotherapy as prescribed by the oncologist.

There are now improved methods available with the cyclotron machine which creates medical isotopes. It generates less than 10% of the nuclear waste produced by research reactors, it cannot produce nuclear weapons, and it is much safer than research reactors. For diagnosis there is magnetic resonance imaging (MRI), computerised tomography (CT) and ultrasound. There are also chemical and biological methods of diagnosis.

'Nuclear Medicine' is a wicked misnomer to persuade patients and public that uranium is essential for the treatment of cancer, it has certainly been proved to cause cancer, and the term 'Nuclear Medicine' may be unique to Australia.

NUCLEAR POWER

Nuclear power is deadly. It significantly contributes to global warming and ozone depletion (US Energy Department). In the US, the enrichment of uranium fuel for nuclear power uses 93% of the refrigerant chlorofluorocarbon (CFC) gas made annually. Global production of CFC is banned under the Montreal Protocol because it is a potent destroyer of ozone in the stratosphere, which protects us from carcinogenic effects of solar ultraviolet light. CFC compounds are also potent global warming agents 10 to 20,000 times more efficient heat trappers than carbon dioxide, which itself is responsible for 50% of the global warming phenomena.

Nuclear power also contributes to global carbon dioxide production. Huge quantities of fossil fuel are expended for the 'front end' of the nuclear fuel cycle, to construct the massive reactor buildings and cooling towers, and to mine, mill, and enrich the uranium fuel. Uranium enrichment is a particularly energy intensive process. In the US, the reactor building must be decommissioned after 40 years of operation, taken apart by remote control, transported and stored. Nuclear power has generated 95% of US high level radioactive waste thus far.

Nuclear power is neither clean or safe and it is extremely costly.

URANIUM WEAPONS

Uranium weapons are illegal, immoral, and very dangerous. In 1996, the World Court confirmed that the principles of the Law of War apply to nuclear weapons. These principles are those of Discrimination, Proportionality and Necessity, Humanity, Neutrality, Environmental Security and Toxicity. Thus nuclear deterrence doctrine, which entails the threat to use massive retaliation to prevent an attack, is simply illegal, and the use of nuclear weapons under any circumstance is illegal because of the nature of the weapons.

Early in 2005, The Uranium Medical Research Centre field team was shocked by the breadth of public health impacts coincident with the depleted uranium bombing in Iraq. A significant portion of the civilian population present symptoms consistent with internal contamination by uranium. The problem is not only the long lasting toxic nature of the weaponry that has been used in Afghanistan, Kosova and Iraq for the peoples of those countries, but the thousands of military and other workers from

many countries including Australia who have spent time in the affected countries. This could be an environmental and human disaster worse than any ever before.

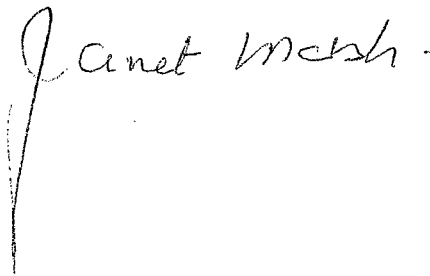
NUCLEAR WASTE

In 2003 the UK government appointed a committee on radioactive waste management to re-examine all possibilities to find a publicly acceptable solution to the nuclear waste problem- something that successive governments have failed to do for 50 years. The government's advisors are considering 14 options, which include firing nuclear waste into the sun, placing it in Antarc ice sheets so it sinks by its own heat to the bedrock, or putting it under the Earth's crust so it is sucked to the molten core. All options are technically possible and many are potentially hazardous- either to current generations or those yet unborn. Most have political drawbacks and are expensive, around 50 billion pounds and counting. The committee has pleaded for an extension of time for finding a solution for nuclear waste disposal.

A uranium mine is a hazard long after it closes. Any government that allows uranium mining and any company involved in it should assume responsibility for the maintenance and monitoring for the nuclear waste generated for at least a quarter of a million years.

I am totally opposed to expansion of Australian uranium mining and strongly believe that Australian uranium being mined now should be substantially reduced to provide only the minimum uranium that is required for medical purposes in Australia, and Australia's trading partners that do not have uranium.

Submitted by Janet Marsh 13 April 2005

Handwritten signature of Janet Marsh in cursive script.