

# **A QUESTION OF TRUST!**

**Why South Africa should take a stronger stance on the transport of plutonium fuel around its coast and through its EEZ**

*AUGUST 1999*



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*“The first shipment of MOX fuel from Europe to Japan initiates the process of recycled nuclear fuel from Europe to Japan ... Similar MOX fuel transports will be performed in the years to come on a regular basis.”*

**BNFL, Cogema and ORC, June 1999**

*“We accept that international law grants any state the right of freedom of navigation of its ships on the high seas of through states’ EEZ [Exclusive Economic Zone] and the right of innocent passage through the territorial sea of coastal states. Notwithstanding, I have requested that the ships stay out of our territorial waters and EEZ.”*

**Joyce Mabudafhasi – Deputy Env Affairs and Tourism Minister, 23 July 1999**

*South Africa’s request will be “carefully taken into account” by the ships Captians: “(The Captains) are responsible for ensuring the safe navigation of the vessels and the safety of the crew, and will take various factors into account -- including, for example, the prevailing weather conditions.”*

**Gavin Carter, BNFL, 7 August 1999**

## BACKGROUND

During the last decade several sea transports of nuclear material have been made between Europe and Japan: the current plutonium MOX fuel shipment is the third such deadly nuclear cargo to round the Cape of Good Hope enroute to Japan. The others rounded the tip of South America (Cape Horn) or passed through the Panama Canal.

Japan's plutonium program allows it to export spent nuclear fuel from power reactors to France and Britain, where it is reprocessed, isolating unused, or unburnt uranium, and plutonium. Vast quantities of radioactive waste are also created during reprocessing. Under French and British law all of the by products of reprocessing must be returned to the country of origin.

A combination of political instability and aggressive resistance in, and by, other enroute states suggest that the Cape of Good Hope is becoming, by default, the route of choice.

The shipments made so far are just the tip of a very large radioactive iceberg. After three decades of Japanese spent fuel reprocessing in Europe a vast mountain of radioactive waste and plutonium is now awaiting return to Japan.

Based on current Japanese/European reprocessing contracts some 45 tonnes of plutonium will be separated from Japanese spent fuel which could lead to a further 80 plutonium MOX fuel nuclear shipments: sufficient to build some 4,800 nuclear weapons.

In addition: under existing European reprocessing contracts some 5,000 containers of high and intermediate level nuclear waste, over 200 separate shipments, will have to be returned to Japan in the coming years.

## DEMOCRACY AND THE LAW

*“It must be stated that transboundary movements of hazardous and toxic substances remains a dangerous enterprise that all civilised nations must seek to ban. Trade in such waste also remains immoral ... No nation must enjoy the right to expose another to danger. Whether within or outside the specific EEZ any accident relating to nuclear or toxic substances will have a detrimental effect to the marine resources.”*

**Peter Mokaba, Deputy Minister of Environmental Affairs and Tourism, 1997**

While the British, French and Japanese -- claiming innocent right of passage -- use the UN Law of the Sea Convention to argue that they need not consult with endangered nations on the route of nuclear transports, this is an abuse of the Law. Under the same law (articles 204, 205, 206) the transporting nations must also conduct an international Environmental Impact Assessment. They have not.

*“Legislation banning shipments from waters under New Zealand's jurisdiction would be challenged by the transport states as contrary to the UN Law of the Sea Convention. The New Zealand government does not concede this point – we consider that international law is evolving in this area, and that more recent developments, such as the ‘precautionary principle’ enshrined in the Rio Declaration, also need to be given due weight.”*

Don McKinnon, New Zealand Minister of Foreign Affairs and Trade

***“States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have significant transboundary environmental effect and shall consult those States at an early stage and good faith.”***

#### **The Rio Declaration (Principle 19), 1992**

Clearly the transporting nations and companies have not acted in good faith. Indeed, the route of this latest plutonium fuel transport was not declared until two days after departure.

The industry's bold claims about the safety of such nuclear transports have not been tested by the international scientific community. The only way to do so is to conduct an international Environmental Impact Assessment. South Africa and other endangered states are being asked to trust the nuclear industry. However, the industry's track record dictates that such trust would be misplaced. Twice, in 1992 and 1997, the South African Government was given assurances that the transports would not transgress its 200 mile EEZ. On both occasions that promise was broken. In 1997, for example, a Japanese high level nuclear waste transport came within 90 miles of the coast.

It is also difficult to reconcile the fact that the current nuclear shipments, two British flagged Pacific Nuclear Transport Ltd merchant freighters, claim innocent right of passage while each carries 13 heavily armed civilian security officers of the UK Atomic Energy Authority Constabulary. Each vessel has also been fitted with three 30mm cannon, capable of unleashing 900 rounds per minute.

### **Liability**

With an increase in the number of transports of plutonium fuel and nuclear waste from Europe to Japan comes an increase in the risk of an accident and massive radioactive contamination of the environment.

While financial recompense can never make up for the loss of life or the contamination of the environment, productive fishing grounds, agricultural land or tourist attractions – plutonium has a half life of some 24,000 years and once in the environment remains a threat virtually for ever – nonetheless there are no adequate international arrangements in place to ensure even basic compensation for any damage caused.

The only way to truly safeguard the health and well being of the peoples of the enroute nations would be to end such nuclear transports, in the interim, however, enroute Governments should seek to obtain bilateral liability agreements with the transporting nations.

### **PROLIFERATION**

***“South Africa must never again allow its resources, scientists and engineers to produce weapons of mass destruction. South Africa's nuclear policies will seek to make the country a responsible member of the international nonproliferation community.”***

In order to match Mandela's words the South African government should examine all possible legal means, working in concert with other enroute nations, to establish legal impediments to the continued production, separation and trade in nuclear weapons usable materials.

Indeed, as the only nation known to have produced and subsequently rejected and destroyed its nuclear weapons, South Africa has considerable moral authority to speak in international fora against plutonium stockpiling.

Otherwise, over the next decade Japan will amass sufficient plutonium for some 4,800 nuclear weapons. Such a programme would inevitably spark an arms race in East Asia.

That this so-called civil plutonium is weapons usable is not open to question, despite the best efforts of the industry to claim otherwise. Two nuclear weapons charged with so-called civilian plutonium are known to have been detonated successfully: one by Britain in 1953, in Australia, and the other by the US in 1962, in Nevada.

The International Atomic Energy Agency says there is *"no debate"* and makes no distinction between weapons or reactor grade plutonium. *"So far as reactor-grade plutonium is concerned,"* warns the US Nuclear Regulatory Commission, *"the fact is that it is possible to use this material for nuclear warheads at all levels of technical sophistication ... we know that even simple designs, albeit with some uncertainties in yield, can serve as effective, highly powerful weapons -- reliably in the kiloton range."*

## **CONCLUSION**

There can be no room for complacency when dealing with the serious environmental and proliferation threats of plutonium fuel and nuclear waste transports. The arrogant disregard for the concerns of threatened enroute nations must be challenged at every opportunity and in every way possible.

It is crucial that South Africa works with all of the threatened enroute states to establish legal bans on such transports transgressing their EEZs and work in international fora, such as the upcoming UN Fissile Material Treaty talks to establish a ban on the production, separation and trade in plutonium. Only then can a cap be put on the security and environmental threats posed by plutonium use and trade, and only then can the legacy of five decades of nuclearisation be brought under control and managed.

Unless the South African Government mounts a significant campaign of opposition to such transports – similar to those which have apparently foreclosed alternative routes -- then its people and environment will face unacceptable risks of devastating nuclear contamination from hundreds nuclear cargoes travelling from Europe to Japan over the next two decades.

**FOR MORE INFORMATION**

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