

SUBMISSION IN RESPONSE TO BEVERLEY FOUR MILE PROJECT PUBLIC ENVIRONMENT REPORT AND MINING LEASE PROPOSAL

Submission by Friends of the Earth, Australia.

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CONTENTS

Introduction

Environmental Pollution - Contamination of Ground-Water

Other Environmental Impacts

Adnyamathanha Traditional Owners

Unacceptable Corporate Behaviour

Secrecy

Nuclear Weapons Proliferation

INTRODUCTION

Friends of the Earth, Australia (FoEA) provides this submission in the hope that the issues raised will be taken seriously during the assessment of the Beverley Four Mile uranium mining proposal. However we expect to PIRSA to rubber-stamp the uranium mining proposal given:

* PIRSA's track record of defending indefensible aspects of uranium mining in SA, e.g. the exemptions from environmental and Aboriginal heritage protections in the Roxby Downs Indenture Act.

* Commonwealth abdication of responsibility for assessing this uranium mining application.

* government acceptance of a Public Environment Report process rather than the more stringent Environmental Impact Assessment.

* disingenuous rhetoric from state leaders (Rann says Beverley Four Mile is a "world class" project) and federal leaders (Peter Garrett says in-situ leach

uranium mining is "world's best practice").

The proponents (Heathgate/Quasar/Alliance) claim credit for alleged benefits arising internationally as a result of uranium mining. For example the 7/1/09 *Beverley Four Mile Project Public Environment - Report and Mining Lease Proposal* document discusses the greenhouse benefits of nuclear power relative to fossil fuels. However the proponents ignore adverse international impacts such as the high-level nuclear waste legacy and the WMD proliferation risks.

ENVIRONMENTAL POLLUTION - ROUTINE CONTAMINATION OF GROUNDWATER

In-situ leach (ISL) uranium mining involves pumping an acid solution (or an alkaline solution in some cases) into an aquifer. This dissolves the uranium ore and other heavy metals and the solution is then pumped back to the surface. The small amount of uranium is separated at the surface. The liquid radioactive waste - containing radioactive particles, heavy metals and acid - is simply dumped in groundwater. For Beverley Four Mile, the proponents propose dumping liquid waste within the Beverley lease area rather than the Beverley Four Mile lease area.

The 2004 CSIRO report states:

"As stated in the Beverley Assessment Report, the bleed solutions, waste solutions from uranium recovery, plant washdown waters and bleed streams from the reverse osmosis plants are collected prior to disposal into the Namba aquifer via disposal wells. These liquid wastes are combined and concentrated in holding/evaporation ponds, with excess injected into selected locations within the mined aquifer. The injected liquid is acidic (pH 1.8 to 2.8) and contains heavy metals and radionuclides originating from the orebody."

(Taylor, G.; Farrington, V.; Woods, P.; Ring, R.; Molloy, R. (2004): Review of Environmental Impacts of the Acid In-Situ Leach Uranium Mining Process.- CSIRO Land and Water Client Report.)

From being inert and immobile in the ore body, the radionuclides and heavy metals are now bioavailable and mobile in the aquifer.

The volume of liquid waste is discussed in the 7/1/09 *Beverley Four Mile Project Public Environment - Report and Mining Lease Proposal* document:

"With the inclusion of maximised recycling of water, approximately 2.5 L/s (averaged over a year) of liquid waste will be generated once the Beverley extraction circuits are decommissioned. This will be disposed of at Beverley ML 6321 in the hydraulically isolated formerly mined Beverley Sands aquifers in the North, Central and South wellfields. It is noted that initially the Beverley Four Mile resin elution circuit and Beverley ML 6321 capture and elution circuits will operate in parallel. During this time the combined volume of liquid waste will remain within an annualised average rate of 5 L/s."

"At the indicated rate there is enough disposal volume in those three wellfields to accommodate up to 16 years of liquid waste. Additional volume exists in Beverley North East, East and Deep South wellfields. Any extension of liquid waste disposal in these areas would be subject to a successful application to the regulatory authorities using the Beverley Mine Procedure for Management of Liquid Waste Disposal (Appendix C of the MARP, Heathgate 2008c) or its approved successor.

The Beverley Four Mile proponents have no plans to remediate the polluted aquifer as they say the pollution will 'attenuate' - that the aquifer will return to its pre-mining state over time. This claim has been queried by the scientific community as being highly speculative with no firm science behind it.

The 2004 CSIRO report endorsed the dumping of liquid waste in ground-water yet the information and arguments it used in support of that conclusion were tenuous. The CSIRO report notes that attenuation is "not yet proven" and the timeframe of "several years to decades" could hardly be more vague. The 2004 CSIRO report states in its Executive Summary:

"The use of acid rather than alkaline leaching and disposal of liquid wastes by re-injection into the aquifer is contentious. Available data indicate that both the leach solution and liquid waste have greater concentrations of soluble ions than does the pre-mining groundwater. However as this groundwater has no apparent beneficial use other than by the mining industry, this method of disposal is preferable to surface disposal. Although not yet proven, it is widely believed and accepted that natural attenuation will result in the contaminated water chemistry returning to pre-mining conditions within a timeframe of over several years to decades."

Elsewhere the 2004 CSIRO report notes uncertainties associated with attenuation:

"The EIA for Beverley and Honeymoon suggest that natural attenuation will occur, however, exact timeframes are not given. The issue of predicting attenuation is made more complex by not fully understanding the microbiological or the mineralogy of the surrounding ore bodies, before and after mining, and how these natural conditions will react with the altered water quality introduced by the injection of leachate, and re-injection of wastewaters. Following general practice, geochemical modelling was undertaken with a series of assumptions where data were not available. Although these assumptions are considered reasonable by the review team, some technical experts have a differing opinion. In any case the results must be considered approximate.

The monitoring results from Beverley are limited by the short duration of mining and operation, and there are currently no completely mined-out areas for which the water chemistry can be followed after mining to verify the extent of the expected natural attenuation. However, pH results for an area that was trial-mined in 1998 and then left until full-scale mining of the same area was due are shown in Figure 13.

Note that whilst other data are available for these wells there are not consistent trends in other analytes. There has been little recovery of groundwater chemistry towards background in the test-production wells other than a favourable change for pH. There are presently no equivalent monitoring data for the northern area, which is presently being mined."

Even if full attenuation does occur over time, it is unlikely to occur in the timeframe of post-mine-closure monitoring proposed by the mining proponent. The 7/1/09 *Beverley Four Mile Project Public Environment - Report and Mining Lease Proposal* document states:

"Heathgate proposes an initial period of five years from the conclusion of commercial operations to complete the decommissioning of facilities. A monitoring and maintenance program is proposed to run for a further two years, for a total of seven years from the final conclusion of mining activities. The total monitoring period will be reviewed with the regulatory authorities and may be extended.

"Facilities will therefore be fully decommissioned within seven years from the conclusion of the commercial operation. This period includes a post-completion monitoring period for vegetation maintenance, groundwater sampling, drainage repairs and other activities to ensure the long-term permanent rehabilitation of the site.

The 2004 CSIRO report states:

"Natural attenuation is preferred to adjusting the chemistry of the wastewater prior to re-injection as the latter would result in the need for additional chemicals on-site, generation of contaminated neutralisation sludges which would have to be disposed of, risk of potential clogging of pore spaces in the aquifer and associated higher costs.

Those are not insurmountable problems. Moreover there are alternatives to adjusting the chemistry of waste-water then reinjecting it into the aquifer, such as evaporation followed by management of solid wastes. As the CSIRO report notes:

"10.6 Alternatives to Liquid Waste Re-Injection

"Suggestions made during the community consultation process included not re-injecting the liquid wastes into the aquifer, and neutralisation of waste before re-injection.

"Not re-injecting the waste into the aquifer would require either sophisticated water treatment and/or the installation of much larger evaporation ponds. Both would generate solid wastes to be disposed of in a solid waste repository. When the wastes dried out they would become a possible dust source, which could increase the potential radiation exposure of workers, in particular in relation to dust inhalation, but also from radon inhalation and gamma exposure. Environmental radiation levels at the surface would also increase. These are presently negligible issues associated with the existing ISL practices.

"Neutralisation of the waste liquid prior to re-injection would precipitate out some metal salts, which would need to be filtered before re-injection, and be disposed of in a solid waste repository.

"Also following re-injection it is likely that the re-injection bores would rapidly clog owing to precipitation around the bores, as the injected water and existing acidic water in the aquifer interact. Clogging of re-injection wellfields and associated problems with pipelines and pumps may increase the risk of spills due to operational problems with equipment and increased maintenance."

None of the issues raised by the CSIRO amount to compelling reasons to support dumping liquid waste in groundwater. Some of the reasons cited are absurd and cast serious doubt over the credibility of the CSIRO review - for example dust suppression is simple and inexpensive.

The SA government should:

- * conduct or commission a thorough comparative assessment of the options for managing liquid waste.
- * insist that the proponents rehabilitate the aquifer to pre-mining conditions and insist on monitoring/remediation until pre-mining conditions are achieved.

The 2004 CSIRO report states:

"For the Beverley operation, groundwater monitoring is required to be conducted for seven years after mining to demonstrate that their expectations in regard to natural attenuation are being borne out. Research into the use of and ability of chemical amendments to assist with or speed up the processes of natural attenuation processes may be beneficial, especially where the latter may be slow and/or incomplete. This approach may also be of benefit in the case of plant or equipment failure with resultant contamination of soil or shallow aquifers."

Has any follow-up work been done to investigate the potential to assist or hasten attenuation?

The 2003 Senate References and Legislation Committee report into the regulation of uranium mining in Australia reported "a pattern of under-performance and non-compliance", it identified "many gaps in knowledge and found an absence of reliable data on which to measure the extent of contamination or its impact on the environment", and it concluded that changes were necessary "in order to protect the environment and its inhabitants from serious or irreversible damage". On ISL mining, the 2003 Senate report stated:

"The Committee is concerned that the ISL process, which is still in its experimental state and introduced in the face of considerable public opposition, was permitted prior to conclusive evidence being available on its safety and environmental impacts."

"The Committee recommends that, owing to the experimental nature and the level of public opposition, the ISL mining technique should not be permitted until more conclusive evidence can be presented on its safety and environmental impacts."

"Failing that, the Committee recommends that at the very least, mines utilising the ISL technique should be subject to strict regulation, including

prohibition of discharge of radioactive liquid mine waste to groundwater, and ongoing, regular independent monitoring to ensure environmental impacts are minimised."

In relation to the Beverley mine, Dr. Gavin Mudd, a hydrogeologist based at Monash University, notes: "The critical data which could answer scientific questions concerning contaminant mobility in groundwater has never been released by General Atomics. This is especially important since GA no longer maintain the mine is 'isolated' from surrounding groundwater, with desires to expand the mine raising legitimate concerns over the groundwater contamination legacy left at Beverley."

Dr Mudd states (in a short statement posted at <www.foe.org.au/anti-nuclear/issues/u/oz>):

The mining technique of in situ leaching (ISL), often referred to as solution mining, is becoming an increasingly favoured method for the extraction of uranium across the world. This is primarily due to its low capital and operating costs compared to conventional mining. Little is known about the environmental impact of this method, and mining companies have been able to exploit this to promote the method as "environmentally benign".

The ISL process involves drilling ground water bores or wells into a uranium deposit, injecting corrosive chemicals to dissolve the uranium within the ore zone, then pumping back the uranium-laden solution.

The method can be applied only to uranium deposits located within a ground water system or confined aquifer, commonly in palaeochannel deposits (old buried river beds).

Although ISL is presented in simplified diagrams by the nuclear industry, the reality is that geological systems are inherently complex and not predictable.

There are a range of options for the chemistry of the mining solutions. Either acidic or alkaline chemical agents can be used in conjunction with an oxidising agent to dissolve the uranium.

Typical oxidising agents include oxygen or hydrogen peroxide, while alkaline agents include ammonia or sodium-bicarbonate or carbon dioxide. The most common acidic chemical used is sulphuric acid, although nitric acid has been tried at select sites and in laboratory tests.

The chemicals can have potentially serious environmental impacts and cause long-term changes to ground water quality.

The use of acidic solutions mobilises high levels of heavy metals, such as cadmium, strontium, lead and chromium. Alkaline solutions tend to mobilise only a few heavy metals such as selenium and molybdenum. The ability to restore the ground water to its pre-mining quality is, arguably, easier at sites that have used alkaline solution chemistry.

A review of the available literature on ISL mines across the world can easily counter the myths promulgated about ISL uranium mining. Whether one examines the USA, Germany, Russia and associated states, Bulgaria, the Czech Republic, Australia or new ISL projects across Asia, the truth remains the same – the ISL technique merely treats ground water as a sacrifice zone and the problem remains "out of sight, out of mind".

ISL uranium mining is not controllable, is inherently unsafe and is unlikely to meet "strict environmental controls". It is not an environmentally benign method of uranium mining.

The use of sulphuric acid solutions at ISL mines across Eastern Europe, as well as a callous disregard for sensible environmental management, has led to many seriously contaminated sites.

Perhaps the most severe example is Straz pod Ralskem in the Czech Republic, where up to 200 billion litres of ground water is contaminated. Restoration of the site is expected to take several decades or even centuries.

Solution escapes and difficult restorations have been documented at ISL sites in Texas and Wyoming.

Australia has encountered the same difficulties, especially at the controversial Honeymoon deposit in South Australia during pilot studies in the early 1980s and at Manyingee in Western Australia until 1985.

The Honeymoon pilot project used sulphuric acid in conjunction with ferric sulphate as the oxidising agent. The wells and aquifer experienced significant blockages due to the minerals jarosite and gypsum precipitating, lowering the efficiency of the leaching process and leading to increased excursions. The aquifers in the vicinity of Honeymoon are known to be connected to aquifers used by local pastoralists to water stock.

Journal articles, conferences papers etc. on ISL mining (and other issues) by Dr. Mudd are posted at:

<http://civil.eng.monash.edu.au/about/staff/muddpersonal>.

The 2004 CSIRO report states in its Executive Summary:

"While ISL technology has environmental and safety advantages when projects are well planned and operated (Underhill 1998), there are several acid ISL operations that have been developed and operated with little or no consideration for the environment. The conditions at these sites are a direct consequence of the Soviet-era operation of uranium mines without effective management of environmental aspects of production, without restoration of contaminated areas, much less planning and design for reclamation and long-term containment of wastes. Similar operating conditions without effective pollution control and closure concepts were apparent at uranium sites in other centrally planned economies such as East Germany, Czechoslovakia and Hungary prior to 1990."

"... The environmental consequences from acid ISL operations under the Soviet-era are significant and a component of the many environmental problems from this era, the majority of which were from mine water/groundwater/tailings/waste rock arising from underground and open cut mines. It is noted that as many of the environmental problems were related to the governance and institutional arrangements of the era, direct comparison with practices in Australia cannot be made."

However a number of the criticisms made of Soviet-era management apply to uranium mining in SA:

* Captured bureaucracies.

- * Slack regulation.
- * Political interference (e.g. Rann pre-empting assessment by describing Beverley Four Mile as a "world class" project).
- * Orwellian doublespeak (e.g. Garrett describing ISL as "world's best practice").

OTHER ENVIRONMENTAL IMPACTS

The 7/1/09 *Beverley Four Mile Project Public Environment - Report and Mining Lease Proposal* document states that there is a 'Moderate' risk of contamination preventing a return to pastoral use. The SA government should insist on a more comprehensive risk assessment including quantitative risk assessment.

A feature of ISL mining is surface contamination from spills and leaks of radioactive solutions. There have been over 20 spills at Beverley, such as the spill of 62,000 litres of contaminated water in January 2002 after a pipe burst, and the spill of 15,000 litres of contaminated water in May 2002.

Beverley uranium is converted into high-level nuclear waste in nuclear power reactors, yet there is still not a single repository anywhere in the world for the disposal of high-level waste from nuclear power.

ADNYAMATHANHA TRADITIONAL OWNERS

It goes without saying that FoEA does not speak on behalf of Adnyamathanha Traditional Owners. Nevertheless the following issues need further consideration.

Consultation with Adnyamathanha Traditional Owners continues to be inadequate and selective. In part this is because of the limitations of Native Title legislation and processes. Heathgate and other proponents of Beverley Four Mile could consult more widely but choose not to do so.

Consultation - Heathgate style - was discussed by Adnyamathanha custodian Jillian Marsh:

"Initial negotiation was misrepresentative, ill-informed, and designed to divide and disempower the Adnyamathanha community."

"[T]he resulting meeting was held under appalling conditions. The company (Heathgate Resources) censored the entire meeting with the assistance of Graham Gunn (local member of Parliament) and the State Police. One Adnyamathanha man that stood up and asked for an independent facilitator from the floor to be elected was immediately escorted by two armed Police holding him on either side (by his arms) to the outside of the building." (Submission to 2002-03 Senate Inquiry.)

The 'Referral of proposed action' document states:

"There is an ongoing stakeholder consultation process established for Beverley, involving different mechanisms for consultation with various

stakeholder groups, and this has been extended to include consultation about the Four Mile project.

In particular, Heathgate and Quasar have developed an effective working protocol with the local Adnyamathanha people. There is general agreement that the Adnyamathanha people want the Beverley operations to continue, they want the benefits to be fairly distributed, and they want more employment and business opportunities. Consistent with this, the Four Mile project has been discussed briefly at the Beverley Advisory Committee (made up of Adnyamathanha representatives and Heathgate and Quasar personnel)."

The consultation process is certainly convenient for Heathgate and other Beverley Four Mile proponents - but it is not inclusive, representative or adequate. FoEA understands that PIRSA will be receiving a submission from an Adnyamathanha Elders group - Anggumathanha Law Elders - on this issue.

The 7/1/09 *Beverley Four Mile Project Public Environment - Report and Mining Lease Proposal* document states:

"It is recognised that different mechanisms are required for effective consultation with various stakeholder groups, and that the level and type of consultation varies between these groups."

The Beverley Four Mile proponents ought to be required to negotiate with the Adnyamathanha Elders group in addition to current consultative mechanisms. There ought to be genuine negotiation including a right of veto for Traditional Owners rather than tokenistic consultation requirements.

The 7/1/09 *Beverley Four Mile Project Public Environment - Report and Mining Lease Proposal* document states:

"The Work Area Clearance methodology adopted by the company in association with the Native Title applicants, has been developed to minimise any potential deleterious impact upon Aboriginal cultural values at all stages of exploration and development within the area. The survey team is selected by representatives of the Adnyamathanha community and consists of up to 8 members. The team is assisted by up to two anthropologists and usually about 5 Heathgate personnel."

The Anggumathanha Law Elders have a radically different view of the adequacy of work area clearance processes than that provided by the Beverley Four Mile proponents.

UNACCEPTABLE CORPORATE BEHAVIOUR

In addition to the selective and inadequate consultation with Traditional Owners, other aspects of Heathgate's behaviour are unacceptable. Heathgate hired a private 'investigator' who infiltrated Friends of the Earth in Melbourne some years ago. This has been acknowledged by senior Heathgate managers (e.g. David Brunt) during visits to the Beverley mine.

Does Heathgate still consider it acceptable to use spies to infiltrate NGOs?

Does General Atomics, 100% owner of Heathgate, consider it acceptable to use spies to infiltrate NGOs?

Do PIRSA and the SA government consider it acceptable for mining companies to use spies to infiltrate NGOs? If not, then any approval for Beverley Four Mile ought to be made conditional on appropriate standards of corporate behaviour.

What investigations has PIRSA conducted into the corporate track record of other companies involved in Beverley Four Mile? (The Four Mile lease is owned by Quasar Resources (75%, an affiliate of Heathgate) and Alliance Craton Explorer (25%), and if approved the project will be operated by Heathgate.)

SECRECY

The 2003 Senate report raised concerns about Heathgate's secrecy. The report noted: "Another serious claim made by the ACF concerns the status and release of Heathgate Resources' reports on the Beverley FLT's [Field Leach Trials], including the Groundwater Monitoring Summary. The ACF states that release of these reports under the Freedom of Information Act was delayed by company claims of commercial-in-confidence for more than two years. A successful ACF appeal to the South Australian Ombudsman finally secured the release of some of these reports, the Ombudsman finding that in no case was a commercial-in-confidence claim justified."

Much of the information required to determine the WMD proliferation risks associated with Australia's uranium exports is kept secret, including:

- * country-by-country information on the separation and stockpiling of Australian-obligated plutonium;
- * 'Administrative Arrangements' which contain vital information about the safeguards arrangements required by Australia; and
- * information on nuclear accounting discrepancies (Material Unaccounted For) including the volumes of nuclear materials, the countries involved, and the reasons given to explain accounting discrepancies.
- * the quantities of Australian Obligated Nuclear Materials held in each country are kept confidential.

NUCLEAR WEAPONS PROLIFERATION

The link between Australia's uranium exports and the proliferation of nuclear weapons is precluded from consideration in assessments such as this Beverley Four Mile PER. The rationale is that the proliferation issue is addressed elsewhere, in particular by the Australian Safeguards and Non-proliferation Office (ASNO). However, ASNO does not seriously address proliferation issues; it is a deeply flawed government agency which ought to be abolished or radically reformed.

The Beverley Four Mile proposal should be rejected, and the mine closed, because Beverley uranium contributes to unacceptable nuclear weapons proliferation risks.

The Director-General of the IAEA, Dr Mohamed El Baradei, is remarkably frank about the limitations of safeguards. In speeches and papers in recent years, Dr El Baradei has noted that the IAEA's basic rights of inspection are "fairly limited", that the safeguards system suffers from "vulnerabilities" and "clearly needs reinforcement", that efforts to tighten the system have been "half hearted" and that the IAEA safeguards system runs on a "shoestring budget ... comparable to a local police department." (Statements posted at: <www.iaea.org/NewsCenter/Statements/index.html>.)

Given those acknowledged flaws, the Australian uranium export industry is indefensible.

In 1982, Mike Rann identified the core problem: "Again and again, it has been demonstrated here and overseas that when problems over safeguards prove difficult, commercial considerations will come first."

The flaws and limitations of safeguards will not be addressed here. They are detailed elsewhere:

- * Friends of the Earth <www.foe.org.au/anti-nuclear/issues/oz/u/safeguards>
- * Medical Association for Prevention of War <www.mapw.org.au/nuclear-chain/safeguards>
- * Who's Watching the Nuclear Watchdog? A Critique of the Australian Safeguards and Non-proliferation Office, Prof. Richard Broinowski et al., 2007, EnergyScience Coalition Briefing Paper #19, <www.energyscience.org.au/factsheets.html>.
- * Medical Association for the Prevention of War and the Australian Conservation Foundation, 2006, An Illusion of Protection: The unavoidable limitations of Australia's safeguards on nuclear materials and the export of uranium to China. On the web at: <www.mapw.org.au/Illusion%20of%20Protection%20index.html>
- * Professor Richard Broinowski, "Fact or Fission? The Truth About Australia's Nuclear Ambitions", Melbourne: Scribe, 2003.
- * Non-Proliferation Policy Education Centre, Feb 2008, "Falling Behind: International Scrutiny of the Peaceful Atom", <www.npec-web.org>.
- * Nuclear Power Joint Fact Finding Dialogue, June 2007, "Final Report, Nuclear Power Joint Fact-Finding", <www.keystone.org/spp/energy07_nuclear.html>

The agency tasked with monitoring Australian uranium, the Australian Safeguards and Non-Proliferation (ASNO), has a track record of peddling misinformation and a track record of incompetence and unprofessionalism. ASNO is the subject of a detailed critique by the EnergyScience Coalition posted at <www.energyscience.org.au>. The problems with the so-called safeguards office are so deep-seated that a compelling case can be made for the abolition of ASNO and its replacement with a genuine safeguards office.

The SA government should conduct or commission an independent public inquiry into ASNO's unprofessional behaviour as per the recommendation of the EnergyScience Coalition (<www.energyscience.org.au>, Briefing Paper #19):

"The authors of this paper believe there is a compelling case for major reform of ASNO as a matter of urgency. An alternative course of action would be for the Australian government to establish an independent public inquiry. Such an inquiry should have a broad mandate to review all aspects of ASNO's structure and function, should be adequately resourced, and should have powers similar to those of a Royal Commission to access witnesses, documents and other evidence.

Such an inquiry should be carried out independently of ASNO. It should also be carried out independently of the Department of Foreign Affairs and Trade (DFAT), given that the current relationship between ASNO and DFAT is arguably one of the areas in need of review. DFAT has declined a request to review a paper detailing numerous inaccurate statements made by ASNO (letter to NGOs, 28 May 2007, available on request).

Such an inquiry should address the competence and performance of ASNO; its scientific and technical expertise; whether its current management, organisation, structure and relationships best serve its mandate; any conflicts of interest; the implications of ASNO's structural connection to DFAT (whether it has sufficient independence or operates as a 'captured bureaucracy'); and options for reform including consideration of organisational models in other countries.

ASNO's previous responses to criticism have included angry and dismissive attacks on its critics, assertions that an entire document can be dismissed on the basis of questionable challenges to just one or two points (see for example ASNO, 'Reactor Grade Plutonium', <www.asno.dfat.gov.au>), and a conspicuous failure to address the substance of a large majority of the criticisms. We sincerely hope that the multiple serious concerns raised in this paper will prompt serious consideration by government and parliamentarians, and responses which are substantive and constructive."