

# Submission to Joint Standing Committee on Treaties

## Inquiry into Proposed Uranium Sales to China

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**Friends of the Earth, Australia (FoEA) would appreciate the opportunity to appear before a hearing of the Committee to address the contents of this submission.**

**FoEA has compiled a list of questions and requests that the Committee seeks answers to these questions from the Australian Safeguards and Non-proliferation Office.**

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## ACROMYNS

- AA – Administrative Arrangements
- AONM – Australian Obligated Nuclear Materials
- ASNO – Australian Safeguards and Nonproliferation Office
- DFAT – Department of Foreign Affairs and Trade
- FMCT – Fissile Material Cut-Off Treaty
- FoEA – Friends of the Earth, Australia
- IAEA – International Atomic Energy Agency
- JSCOT – Joint Standing Committee on Treaties
- MUF – Material Unaccounted For
- NPT – Nuclear Non-proliferation Treaty
- NWS – Nuclear Weapons States
- UN – United Nations
- VOA – Voluntary Offer Agreement (VOA)
- WMD – Weapons of Mass Destruction

## QUESTIONS FOR ASNO

**FoEA has compiled a list of questions and requests that the Committee seeks answers to these questions from the Australian Safeguards and Non-proliferation Office.**

1. Can ASNO comment on the accuracy of the 13/3/06 Australian Financial Review report which states that inspections of Chinese nuclear facilities were "very, very unlikely" with the quote apparently attributed to Australian negotiators involved in discussions with the Chinese regime over uranium exports. (Stephen Wyatt, All clear for uranium sale to Chinese, AFR, 13/3/06, p.1.)

2.1 What are the minimum and maximum inspection options open to the IAEA. As a minimum, need the IAEA carry out any inspections whatsoever? As a maximum, does the IAEA have the right to maintain a permanent office in China or permanent on-site monitoring of particular nuclear facilities?

2.2 Is China one of the small number of countries which has allowed video monitoring of its safeguarded nuclear facilities? Are any, some, or all of the Chin's safeguarded facilities subject to video monitoring.

2.3 Has the Chinese regime permitted environmental sampling and if so, have samples actually been taken?

3.1 Can ASNO confirm that Chinese nuclear facilities which are theoretically subject to safeguards inspections are not necessarily inspected depending on whether the IAEA selects them?

3.2 On what basis does the IAEA make such selections?

4.1 In the event of a suspected safeguards breach in China, what formal channels would the IAEA be required to pursue to redress the situation?

4.2 ASNO's John Carlson states that "we would expect to be advised informally if any issues had arisen in the course of an inspection" in China. If no such informal advice was forthcoming, at what stage would Australia become aware of a suspected breach of safeguards agreements and would ASNO have any capacity to determine if AONM was involved?

5. Can ASNO provide a full list of facilities in China subject to IAEA safeguards and explain why these are not listed in the IAEA's 2005 Annual Report?

6.1 Why does the agreement allow for such a lengthy negotiation process – 12 months – in the event of ia dispute?

6.2 Is an equally lengthy negotiation process set out in agreements with other countries receiving Australian uranium?

7.1 Can ASNO supply a list of all cases when Australia has refused third party transfers?

7.2 Can ASNO confirm that Australia has never once refused permission for plutonium separation (reprocessing) or high enrichment?

8.1 What possible reason could a uranium customer country have for being unwilling to have the details of Administrative Arrangements made public?

8.2 Why has DFAT/ASNO (or why have successive governments) bowed to the request of some countries to keep AA details secret?

8.3 Is China willing to have details of its AA with Australia published in full when

it is completed?

9 Who must approve changes to Administrative Arrangements?

10.1 Can ASNO confirm that all of Australia's uranium exports to China could be used in nuclear weapons without even breaching the terms of the agreement – so long as an equivalent amount of nuclear material is transferred into safeguards.

10.2 In relation to the transfer of an equivalent quantity of converted uranium in the form of uranium hexafluoride to the inventory of an enrichment facility that is under IAEA safeguards, can ASNO confirm that the IAEA may or may not actually verify that this has occurred depending on its process of selectively safeguarding facilities in Nuclear Weapons States?

11.1 Why has the IAEA not sought to revise its policy in relation to conversion facilities in Nuclear Weapons States?

11.2 Has the IAEA's policy in relation to conversion facilities in Non-Nuclear Weapons States resulted in all such facilities being brought under safeguards?

11.3 Has DFAT/ASNO asked the Chinese regime if it would accept IAEA safeguards on conversion facilities?

11.4 Has the Australian government considered making it a condition of sale that China's conversion plant/s be brought under IAEA safeguards?

12. Why does ASNO believe China refuses to ratify the Comprehensive Test Ban Treaty?

13.1 Does ASNO acknowledge uncertainty as to its assessment that China has "ample material" to produce more nuclear weapons?

13.2 Approximately how much fissile material does ASNO believe China has stockpiled?

14.1 Has the Chinese regime "confirmed" that it has a moratorium on fissile material production for weapons?

14.2 Will the Australian government permit uranium sales to China in the absence of Chinese "confirmation" of a moratorium on fissile material production for weapons?

14.3 Will the Australian government suspend uranium sales if the Chinese regime resumes producing fissile material for weapons?

15 Can ASNO advise as to the separation of military and civil fuel cycles in China?

16.1 Is ASNO opposed to the stockpiling of plutonium?

16.2 Would ASNO recommend that permission for plutonium separation in China be revoked in the event of China's separated plutonium stockpile consistently increasing?

17.1 Is ASNO aware of US government sanctions recently imposed by the US government against four Chinese firms for WMD-related exports?

17.2 Is ASNO aware that the same four companies were subject to sanctions in 2004 under the Iran Nonproliferation Act?

17.3 How does ASNO/DFAT justify the claim that "China has strengthened its domestic controls on the export of WMD-related items and further developed its enforcement procedures"?

18.1 Does ASNO believe that AONM can be adequately safeguarded in the event of major, protracted social and political upheaval in China?

18.2 Is ASNO confident that the IAEA's inspection rights would be undiminished in the event of major, protracted social and political upheaval in China?

18.3 Are there examples in other countries of IAEA inspections continuing without being adversely effected by major social and political upheaval?

## 1 SUMMARY

Uranium sales to the Chinese regime – or state agencies or private corporations under the regime's direct or indirect control – cannot be justified because of:

- \* the regime's active WMD programs, including its nuclear weapons program, failure to ratify the Comprehensive Test Ban Treaty, blocking progress on the Fissile Material Cut-Off Treaty, etc.

- \* the regime's ongoing military and WMD-related exports to countries such as Iran, North Korea, Libya and Pakistan.

- \* limitations of IAEA safeguards, particularly in relation to 'declared' Nuclear Weapons States including China.

- \* limitations of bilateral agreements.

- \* lack of civil society safeguards which impact on the potential to safeguard Australian uranium – labour and human rights and whistleblower protections, and press freedom.

Friends of the Earth, Australia (FoEA) is opposed to the uranium mining and export industry for various reasons including the risk of Australian Obligated Nuclear Materials (uranium and by-products such as plutonium) contributing to vertical and horizontal weapons proliferation. For so long as the uranium mining and export industry continues in Australia, a set of non-discriminatory policies should be adopted to minimise the risk of AONM contributing to proliferation.

Examples include:

- \* no uranium sales to nuclear weapons states within the NPT (USA, UK, France, China, Russia) or outside the NPT (India, Israel, Pakistan, possibly North Korea)
- \* no uranium sales to 'declared' nuclear weapons states which pay lip-service to their NPT disarmament obligations, regardless whether they have been formally found to be in violation of their NPT commitments by the UN/IAEA (USA, China, France, UK, Russia)
- \* no uranium sales to countries which refuse to ratify the Comprehensive Test Ban Treaty (of the 44 states listed in the CTBT agreement, China, Colombia, Egypt, Indonesia, Iran, Israel and the United States have not ratified while North Korea, India and Pakistan have not signed).
- \* no uranium sales to countries blocking progress on the Fissile Material Cut-Off Treaty (e.g. China, USA)
- \* no uranium sales to countries involved in the separation of plutonium from spent nuclear fuel (a.k.a. reprocessing) within or beyond its borders (e.g. China, USA, UK, France, Japan, South Korea, etc etc etc).

A consequence of those policies would be refusal to sell uranium to China.

How to address the issue of civil society safeguards is more complicated because the issues themselves are more complicated. Nevertheless, the issue must be addressed since it relates directly to the safeguarding of AONM. A simple starting point would be to establish a benchmark by refusing to sell Weapons of Mass Destruction (WMD) feedstock in the form of uranium to China because it ranks so poorly on the relevant criteria:

- \* the regime's human rights record is appalling by any measure.
- \* whistleblowers are persecuted rather than protected
- \* labour and union rights are all but non-existent; and
- \* China ranks in the worst 10 countries in the world for press freedom.

## **2 CONTEXT – 'PEACEFUL' NUCLEAR PROGRAMS AND WMD PROLIFERATION**

Nuclear power is the only energy source with a direct and repeatedly-demonstrated connection to the production of (WMD).

Over 20 countries have misused supposedly peaceful nuclear facilities and materials for WMD research and/or production. In most cases, this has been small-scale and short-lived weapons research and has fallen far short of a systematic weapons program. But in four or five countries, peaceful nuclear programs have led to the full-scale production of WMD – Israel, India, Pakistan,

South Africa, and possibly North Korea.

The five 'declared' nuclear weapons states – the US, the UK, Russia, France, and China – routinely transfer personnel from their 'peaceful' nuclear programs to their WMD programs, and the USA uses a power reactor to produce tritium for use in nuclear weapons.

These proliferation issues are discussed in detail in Nuclear Power: No Solution to Climate Change (long version, chapter 3), at [www.melbourne.foe.org.au/documents.htm](http://www.melbourne.foe.org.au/documents.htm).

### **3 AUSTRALIAN URANIUM AND CHINESE NUCLEAR WEAPONS**

If NPT/IAEA and/or bilateral safeguards provided certainty that AONM would not be diverted to WMD production, we need not concern ourselves with the Chinese regime's WMD programs or the lack of civil society safeguards. If China was a stable, democratic country with no WMD programs, and no foreseeable likelihood of pursuing WMD, uranium sales might be contemplated regardless of the flaws in the safeguards system.

Neither of the above-mentioned scenarios applies to China. The Chinese regime has WMD, no intention of fulfilling its NPT disarmament obligations, civil society safeguards are largely absent, and the NPT/IAEA and bilateral safeguards fall a long way short of guaranteeing that AONM will not be diverted.

Prime Minister John Howard has conceded that ultimately Australians must put our faith in the Chinese regime not to use Australian uranium in nuclear weapons. He did not explain what the repressive, militaristic, secretive Chinese regime has done to earn that trust.

DFAT states:

"Assurances that AONM will not be used for military purposes derive from a number of factors, which include: (1) China's willingness to give a treaty-level commitment to use AONM solely for peaceful purposes; (2) the safeguards agreements China has with both the IAEA and Australia; (3) detailed nuclear accounting information to be reported to ASNO; (4) uranium would be bought for power utilities for electricity generation and not sold for unspecified purposes; and (5) the five countries recognised as NWS under the NPT – China, France, Russia, UK and USA – have sufficient fissile material for their military programs – it is widely believed China ceased production of fissile material for nuclear

weapons some years ago." (<[www.dfat.gov.au/geo/china/treaties/faq.html](http://www.dfat.gov.au/geo/china/treaties/faq.html)>)

To take those five points in turn:

*(1) China's willingness to give a treaty-level commitment to use AONM solely for peaceful purposes.*

This counts for little or nothing. The Chinese regime also has a commitment to its WMD as evidenced by its refusal to ratify the CTBT and its role in blocking progress on the FMCT.

*(2) the safeguards agreements China has with both the IAEA and Australia*

The flaws in NPT/IAEA and bilateral safeguards are addressed below.

*(3) detailed nuclear accounting information to be reported to ASNO*

In some or most occasions, Chinese nuclear material accounting will not be verified by the IAEA. There is no reason to trust the Chinese regime in relation to nuclear accountancy or anything else.

ASNO will receive and rubber-stamp the information/misinformation supplied by the Chinese regime. Obviously this counts for nothing given that in some/most occasions, there is no verification by the IAEA (or anyone else) of the accuracy of the accounting.

It should go without saying that if China diverts AONM, it will likely falsify nuclear accounting reports.

*(4) uranium would be bought for power utilities for electricity generation and not sold for unspecified purposes*

China is one of the most undemocratic nations on earth. Power utilities cannot be expected to resist attempts by the Communist regime to divert AONM.

*(5) the five countries recognised as NWS under the NPT – China, France, Russia, UK and USA – have sufficient fissile material for their military programs – it is widely believed China ceased production of fissile material for nuclear weapons some years ago.*

ASNO's John Carlson states that: "[F]our of the five [Nuclear Weapons States] have announced a moratorium on fissile production for weapons, and such production



ceased in the 1980s or 1990s. China has not made any formal announcement, but there are indications that it concluded fissile production for weapons in the early 1990s." (John Carlson, Contemporary bilateral safeguards agreements: the Australian way, Trust & Verify, Oct 2005 – Feb 2006, Issue 122, <[www.vertic.org/assets/TV122.pdf](http://www.vertic.org/assets/TV122.pdf)>.)

"Indications" ought not suffice. A formal announcement would provide little comfort since the regime cannot be trusted. The Chinese regime's refusal to ratify the CTBT and its approach to the FMCT provide further reasons for concern. There are forces at play encouraging vertical proliferation in China, the most important being the US missile defence program.

Little is known with confidence about the Chinese regime's fissile material stockpile. Most likely it has, at least, a small stockpile but it is far from certain that it has sufficient fissile material for a significant expansion of its nuclear weapons arsenal.

**Safeguards agreements do not and cannot "ensure" that AONM will not be diverted.**

Foreign Minister Alexander Downer states in a 3/4/06 media release that the China/Australia agreements "establish strict safeguards arrangements and conditions to ensure Australian uranium supplied to China, and any collaborative programs in applications of nuclear technology, is used exclusively for peaceful purposes."

(<[www.foreignminister.gov.au/releases/2006/fa033\\_06.html](http://www.foreignminister.gov.au/releases/2006/fa033_06.html)>)

That is one of countless examples of misleading information by the Foreign Minister, DFAT and ASNO. Another example is provided by the ASNO/DFAT 'National Interest Analysis' which states that the Agreement "establishes strict safeguards arrangements and conditions to ensure such supplies are used exclusively for peaceful purposes."

For further examples, see the ASNO website.

The use of the term "ensure" strongly implies that there is no risk of diversion. Clearly there is a risk of diversion, however large or small the risk may be. (Downer also confuses Australian uranium with AONM.)

While ASNO routinely indulges in misleading statements regarding the potential for diversion of AONM, ASNO's John Carlson conceded the possibility of

diversion (without nominating specific countries) in a submission to the 2005-06 House of Representatives uranium inquiry. (Supplementary submission #33-33.4, <[www.aph.gov.au/house/committee/isr/uranium/subs.htm](http://www.aph.gov.au/house/committee/isr/uranium/subs.htm)>.)

The JSCOT should ask DFAT/ASNO to stop stating that IAEA and/or bilateral safeguards "ensure" that AONM will not be diverted since such terminology falsely implies that there is no risk of diversion.

## **4 INADEQUATE IAEA SAFEGUARDS**

The limitations of IAEA safeguards are addressed in detail in Nuclear Power: No Solution to Climate Change (long version, chapter 3), at <[www.melbourne.foe.org.au/documents.htm](http://www.melbourne.foe.org.au/documents.htm)>.

IAEA Director-General Mohamed El Baradei has described the IAEA's basic inspection rights as "fairly limited", complained about "half-hearted" efforts to improve the system, and expressed concern that the safeguards system operates on a "shoestring budget ... comparable to a local police department". (References available on request and see Dr. El Baradei's statements at <[www.iaea.org/NewsCenter/Statements/index.html](http://www.iaea.org/NewsCenter/Statements/index.html)>.)

The treaty text makes no provision for Australian inspections of AONM in China or of Chinese nuclear facilities using AONM (except as a possible fall-back measure in the absence of IAEA safeguards). Australia is entirely reliant on the IAEA's flawed and under-resourced safeguards system to prevent diversion of AONM.

Despite the above points, the Australian government and ASNO persist with fiction that there is no risk of diversion of AONM in China or elsewhere.

A 2005 survey of 1,020 Australians carried out by the International Atomic Energy Agency found that 56% considered the Agency's 'safeguards' inspection system to be ineffective. (Reference and further details available on request.)

### **AONM is not fully accounted for – Material Unaccounted For**

According to ASNO's John Carlson, Australian uranium is fully accounted for. But this is just obfuscation. What Carlson means when he says that Australian uranium is fully accounted for is that there are often discrepancies between expected and recorded amounts of nuclear materials, but ASNO accepts the various explanations given for these discrepancies. This is clearly at odds with a

common-sense understanding of the term 'fully accounted for'. Moreover, the IAEA is incapable of verifying all nuclear materials accounting.

Recommendation: The JSCOT should ask ASNO to desist from stating that AONM is "fully accounted for" and should instead acknowledge the truth of the situation: that there are routine accounting discrepancies and that the IAEA does not verify nuclear materials accounting in many cases.

A further problem is that ASNO refuses to provide information on the routine accounting discrepancies, which are known as Material Unaccounted For (MUF). There is no justifiable reason for this secrecy.

Recommendation: The JSCOT should ask ASNO to release all data it has compiled on MUF and commit to routine release of MUF data in future. This should include reasons given to explain each instance of MUF and why ASNO has / has not accepted the reasons given.

The IAEA is also unable or unwilling to provide detailed information on MUF. Yet it is a vital issue and requires maximum transparency. The IAEA says that IAEA safeguards inspectors have the job of assessing whether reasons given to explain MUF are plausible and, if not, to consider the possibility of diversion.

ASNO states: "details of accounting for AONM by Australia's bilateral partners are confidential." Why?

In short, the approach of the IAEA and ASNO to the crucial issue of MUF is: 'trust us'. But the IAEA has a conflict of interest given that it is charged with promoting nuclear expansion (including the spread of dual-use nuclear facilities and materials). And ASNO has a track record of making misleading statements, such as its numerous claims that safeguards "ensure" that AONM will not be diverted. The situation clearly requires redress — and far greater transparency.

ASNO's unconvincing explanation as to why it believes AONM was not used in South Korea's secret nuclear weapons research provides one illustration of the broader problem (see submissions from FoEA to the House of Representatives 2005-06 uranium inquiry).

### **Inadequate resources for safeguards**

The IAEA's verification program operated under conditions of a zero real growth budget for more than 15 years, then there was an increase in the regular budget by

12.4% for 2004, with a further 3.3% increase foreseen for 2005. The total regular budget spent on safeguards for the year of 2005 amounts to \$119,854,787. (IAEA, correspondence.)

The IAEA is unable or unwilling to provide information on money spent per Significant Quantity (one Significant Quantity is the quantity of nuclear material required for one nuclear weapon). However, money spent per SQ has clearly declined significantly since the IAEA's verification budget has been stagnant until recently. In fact, ASNO concedes that money spent per SQ has declined. While the safeguards challenge does not rise in *direct* proportion to the number of SQ's, there is a correlation. Add to this the increased effort required to meaningfully implement strengthened safeguards. Hence Dr El Baradei's complaint that the safeguards system operates on a "shoestring budget".

Given that under-resourcing is still clearly a major issue, the statements of Downer/DFAT/ASNO et al. that there is no risk of diversion of AONM become all the more indefensible.

### **IAEA safeguards as applied to Nuclear Weapons States including China**

Notwithstanding efforts to improve the IAEA's safeguards system, flaws and limitations remain even in countries with Additional Protocols. The system is far weaker for declared Nuclear Weapons States (NWS) than for Non-Nuclear Weapons States.

As ASNO's John Carlson states: "In a nuclear-weapon state (NWS), the basic requirement is for 'obligated' material or items to be subject to the state's voluntary offer safeguards agreement (VOA) with the IAEA." (John Carlson, Contemporary bilateral safeguards agreements: the Australian way, Trust & Verify, Oct 2005 – Feb 2006, Issue 122, <[www.vertic.org/assets/TV122.pdf](http://www.vertic.org/assets/TV122.pdf)>.)

Therefore, a decision by the Chinese regime to remove a facility from voluntary safeguards would in no way be a breach of IAEA safeguards commitments. It would only amount to a breach of the Australia-China bilateral agreement. There would be no UN/IAEA involvement in resolving a situation whereby a facility using AONM was withdrawn from IAEA safeguards.

This was acknowledged by ASNO's John Carlson in Senate Estimates:  
Senator Milne – Is there anything to stop the Chinese from withdrawing those facilities from IAEA inspection at any time?

Mr Carlson – Under the agreement with Australia China cannot do that without

Australian consent. (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee.)

Senator MILNE – Is the agreement with the IAEA as well, though? The point is that China's agreement for inspection is with the IAEA. Australia's agreement with China is separate from that.

Mr Carlson – That is correct. Under China's agreement with the IAEA, it can withdraw facilities from the eligible facility list for inspections. That is how a safeguards agreement with a nuclear weapons state operates. In our negotiations with China we specified that China should first obtain Australia's consent before it withdraws facilities from the coverage of its agreement with the IAEA, and China has agreed to that condition.

There is no attempt by the IAEA to specifically safeguard AONM. As Carlson states: "Although the IAEA does not distinguish AONM from other nuclear material, the fact that comprehensive safeguards apply to all nuclear material in the country provides the basic assurance that the peaceful use commitment under the bilateral agreement is being met." (Contemporary bilateral safeguards agreements, cited above.)

Since there is no provision for direct Australian involvement in safeguarding AONM in China, and since the IAEA does not specifically safeguard AONM in China, there is no specific safeguarding of AONM in China (independent of China's nuclear accounting).

IAEA safeguarding is selective – not all facilities subject to safeguards are actually inspected. AONM is not specifically safeguarded by the IAEA or Australia. In some – perhaps most – circumstances, 'safeguards' amount to nothing more than agencies under the authority of the Chinese regime providing materials accounting reports to ASNO.

In other words, we take the Chinese regime on trust though it is anything but trustworthy.

Carlson notes that "ASNO cross-checks reports on AONM provided by the state for consistency with information from the IAEA and other sources".

(Contemporary bilateral safeguards agreements, cited above.) Unfortunately safeguards will in some – perhaps most – cases amount to nothing more than the cross-checking reports from the Chinese regime, and non-specific IAEA data.

According to Carlson (emphasis added): "Under the agreement we have concluded with China, China has agreed that all facilities using Australian

material will be on a facility list agreed with Australia and will be subject to China's agreement with the International Atomic Energy Agency. Australia and China will agree on which facilities will use Australian uranium. China will supply reports to us on the movement of that uranium through the facilities and facilities *can be selected* for inspection by the IAEA." (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee.)

There is no requirement for the IAEA to actually inspect facilities which are subject to safeguards inspections, including facilities using AONM.

Question: Can ASNO comment on the accuracy of the 13/3/06 Australian Financial Review report which states that inspections of Chinese nuclear facilities were "very, very unlikely" with the quote apparently attributed to Australian negotiators involved in discussions with the Chinese regime over uranium exports. (Stephen Wyatt, All clear for uranium sale to Chinese, AFR, 13/3/06, p.1.)

Questions: Can ASNO supply information on the implementation of inspection rights in China. Specifically:

- \* What are the minimum and maximum inspection options open to the IAEA. As a minimum, need the IAEA carry out any inspections whatsoever? As a maximum, does the IAEA have the right to maintain a permanent office in China or permanent on-site monitoring of particular nuclear facilities?
- \* Is China one of the small number of countries which has allowed video monitoring of its safeguarded nuclear facilities? Are any, some, or all of the Chin's safeguarded facilities subject to video monitoring.
- \* Has the Chinese regime permitted environmental sampling and if so, have samples actually been taken?

According to ASNO's John Carlson: "The IAEA has the right to select facilities for inspection in a nuclear weapons state and, if it does select a facility, it will obtain the detailed accountancy records for that facility." (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee.)

The accountancy records may be detailed but they may not be accurate and the provision of unverified records in no way precludes the possibility of diversion.

Questions:

- \* Can ASNO confirm that Chinese nuclear facilities which are theoretically subject to safeguards inspections are not necessarily inspected depending on whether the IAEA selects them?
- \* On what basis does the IAEA make such selections?

## **Informal IAEA advice of suspected diversion**

At the 4/9/06 JSCOT hearing, John Carlson from ASNO said:

**Senator WORTLEY** – Could you provide some information in relation to how the inspections are carried out and what Australia's involvement is?

**Mr Carlson** – The inspections would be carried out by the IAEA. There is no direct Australian involvement. It is up to the IAEA to decide exactly what it inspects and how frequently it inspects. The Australian involvement would be in the form of liaising with the IAEA to ensure that there were no adverse findings from an inspection, so we would expect to be advised informally if any issues had arisen in the course of an inspection.

([www.aph.gov.au/house/committee/jsct/8august2006/hearings.htm](http://www.aph.gov.au/house/committee/jsct/8august2006/hearings.htm) or direct download: [www.aph.gov.au/hansard/joint/committee/J9632.pdf](http://www.aph.gov.au/hansard/joint/committee/J9632.pdf).)

Questions:

\* In the event of a suspected safeguards breach in China, what formal channels would the IAEA be required to pursue to redress the situation?

\* ASNO's John Carlson states that "we would expect to be advised informally if any issues had arisen in the course of an inspection" in China. If no such informal advice was forthcoming, at what stage would Australia become aware of a suspected breach of safeguards agreements and would ASNO have any capacity to determine if AONM was involved?

## **Chinese facilities subject to IAEA safeguards**

At the 4/9/06 JSCOT hearing:

Mr WILKIE – Is it true they have only agreed to have three facilities inspected at this stage?

Mr Carlson – No, that is not correct. I have not got in my head the full number of facilities that are on the IAEA list, but it includes the two Russian supplied centrifuge enrichment plants plus all foreign supplied power reactors, so from France, Canada, and Japan. So there are several facilities currently on the eligible facility list.

The IAEA 2005 Annual Report only lists three facilities:

*Table A5. Facilities under Agency Safeguards or Containing Safeguarded Material on 31 December 2005*

Power reactor – QSNPP 1 – Hai Yan

Research reactor – HTGR 1 – Nankou

Enrichment plant – Shaanxi – Han Zhong

(IAEA 2005 Annual Report, Annex,  
<[www.iaea.org/Publications/Reports/Anrep2005/index.html](http://www.iaea.org/Publications/Reports/Anrep2005/index.html)>.)

Question: Can ASNO provide a full list of facilities in China subject to IAEA safeguards and explain why these are not listed in the IAEA's 2005 Annual Report?

### **Additional Protocol**

An Additional Protocol was brought into force in China on 28/3/02. This is not a requirement for uranium sales to Nuclear Weapons States under current Australian government policy.

Question: Can ASNO advise as to whether China's Additional Protocol agreement with the UN/IAEA is publicly available information?

Additional Protocol agreements vary in detail as the IAEA acknowledges (see below). There are unresolved questions as to whether the IAEA can meaningfully implement expanded rights under Additional Protocols given the chronic under-resourcing of safeguards.

According to the IAEA: "Under four of the five voluntary offer safeguards agreements in force, safeguards were implemented in 2004 at facilities selected by the Agency in four States: China, France, the United Kingdom and the United States of America. Safeguards activities in the Russian Federation were limited to the evaluation of accounting reports on the export and import of nuclear material as no facilities were selected in 2004 for inspection from the State's list of eligible facilities. All five of these States have signed additional protocols with the Agency. Although these protocols are based on the Model Additional Protocol, they vary in terms of coverage and scope.

"... By the end of 2004, the Agency had voluntary-offer safeguards agreements in force with the five nuclear-weapon States party to the NPT. Additional protocols were implemented in China, France and the United Kingdom. Verification activities in the field were carried out in four States. The Agency carried out 103 safeguards inspections utilizing 1065 CDFs in order to verify nuclear material placed under safeguards in these States."

(IAEA, Safeguards Statement for 2004, Background to Safeguards Statement and Executive Summary of the Safeguards Implementation Report for 2004, <[www.iaea.org/OurWork/SV/Safeguards/es2004.html](http://www.iaea.org/OurWork/SV/Safeguards/es2004.html)>.)

Evidently the IAEA selects which facilities will be safeguarded – and those which



will not.

## 5 PENALTIES AND COMPLIANCE

At the 4/9/06 JSCOT hearing, ASNO's John Carlson addressed the issue of breaches:

Senator WORTLEY – What avenues or redress are available to the Australian government if there is a breach of agreement?

Mr Carlson – Two avenues. One is, as I have mentioned before, our right to suspend transfers but also the agreements have a dispute settlement mechanism involving, first, an attempt to resolve a dispute by diplomatic means and, second, if that fails, a compulsory arbitration process.

At the 4/9/06 JSCOT hearing, Carlson said: "If China was in breach of an agreement then we could clearly suspend all further transfers, which would include material passing through other countries on its way to China. We would also have the right to require the return of everything supplied. I think that the practical sanction on China, if you like, is that it will become increasingly dependent on uranium imports for its nuclear power program. It would clearly not be in China's interest to disrupt energy supply. A breach of an agreement with Australia would be taken very seriously by all uranium suppliers – and all nuclear suppliers for that matter – because China will also be buying its reactors from other countries. It clearly would not be in China's interest to place itself in a position where a supply might be halted by a whole range of suppliers."

Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee:

Senator Milne – What enforcement and compliance mechanism is in place?

Mr Carlson – For a start, we do not believe that China will act in bad faith or we would not be concluding an agreement with China. If it were to break a condition of the agreement then Australia has the right to terminate all further transfers and to require the return of material already supplied.

Senator Milne – How would you require the return of material already supplied when it has been enriched and processed and passed on to either weapons or nuclear power facilities?

Mr Carlson – I can assure you for a start that it would not be passed on to weapons. That is the whole purpose of the agreement. The fact that China is intending to operate a very large scale electricity program means that it is not attempting to subvert rules to obtain nuclear material for weapons. ... As to the question of what we would do in practice if we ever had to invoke this right, that is obviously a situation we would face if it happened. ... In China's case, or in the

case of any other country for that matter, the penalty for breach would be very severe because they would be dependent on imports for a sizeable proportion of their electricity and those imports would be terminated.

Article XIII of the April 3, 2006 Australia/China agreement that: "If any dispute between the Parties arises relating to the interpretation or application of this Agreement, the Parties shall in the first place settle the dispute by negotiation. If the Parties fail to reach a settlement of the said dispute within twelve months, the Parties may settle such dispute through diplomatic channels or through arbitration."

FoEA's concerns with the above-mentioned issues are as follows:

- \* Suspending further uranium shipments will not prevent military use of AONM already supplied. Suspension could have the effect of removing one disincentive to divert AONM.

- \* It is far from certain that uranium shipments would be suspended in the case of a suspected breach. There is a recent precedent here. Uranium sales to South Korea were not suspended despite revelations of secret nuclear weapons research projects from 1979-2000. As Mike Rann noted in his 1982 book, 'Play it Safe': "Again and again, it has been demonstrated here and overseas that when problems over safeguards prove difficult, commercial considerations will come first."

- \* China may or may not "become increasingly dependent on uranium imports for its nuclear power program". The nuclear expansion program may not be realised. It is also conceivable, however unlikely, that China might develop non-uranium-based fuel cycles based on plutonium or thorium.

- \* A breach of an agreement with Australia may or may not be "taken very seriously by all uranium suppliers – and all nuclear suppliers for that matter – because China will also be buying its reactors from other countries".

- \* The agreement provides for 12 months of negotiation in the event of a dispute, followed by a potentially protracted arbitration process. Why such a long negotiation period?

Questions:

- \* Why does the agreement allow for such a lengthy negotiation process – 12 months – in the event of a dispute?

- \* Is an equally lengthy negotiation process set out in agreements with other countries receiving Australian uranium?

There are numerous plausible scenarios which would make it difficult or impossible to safeguard AONM:

- \* The Chinese regime might be expected to permit safeguards so long as it wants further uranium from Australia. But Australian uranium exports to China will not last forever and could be terminated at any point in time for a variety of reasons.
- \* The Chinese regime promises military action in the event that Taiwan declares independence, and Washington promises a military reaction in which Australia could become embroiled. In those circumstances, it would be all but impossible to prevent AONM being used in Chinese nuclear weapons.
- \* There is serious concern that the NPT/IAEA system could collapse. For example, the 2004 report of the UN Secretary-General's High Level Panel on Threats, Challenges and Change noted: "We are approaching a point at which the erosion of the non-proliferation regime could become irreversible and result in a cascade of proliferation." In such circumstances, it is unlikely that IAEA safeguards would continue to apply. Moreover, in such circumstances, there is no certainty whatsoever that fallback provisions, such as Australian inspections, would be feasible.

## 6 BILATERAL AGREEMENTS

ASNO's John Carlson states: "[T]he NWS are not subject to comprehensive IAEA safeguards, so bilateral agreements are the only way of applying peaceful use conditions to the supply of nuclear material and items to them. (John Carlson, Contemporary bilateral safeguards agreements: the Australian way, Trust & Verify, Oct 2005 – Feb 2006, Issue 122, <[www.vertic.org/assets/TV122.pdf](http://www.vertic.org/assets/TV122.pdf)>.)

Provisions in bilateral uranium export agreements between Australia and customer countries have been gradually and repeatedly weakened since the basic framework was established in 1977 by the Fraser government. This is addressed in detail in Prof. Richard Broinowski's 2003 book, 'Fact or Fission'.

The provisions in bilateral agreements certainly do not guarantee that there will be no diversion of nuclear materials to WMD production.

Nor does the combined weight of bilateral agreements plus IAEA safeguards ensure that AONM will not be diverted.

The bilateral provisions are in some cases meaningless. For example, Australian consent is required before reprocessing spent nuclear fuel produced using Australian uranium. But consent to reprocess has never once been withheld by any Australian government – even when it leads to the stockpiling of plutonium and the consequent regional tensions, as with Japan's enormous plutonium stockpile.

Nor has the right to prevent high enrichment ever been invoked since no such request has ever been received.

It would be instructive to learn more about other aspects of bilateral agreement.

Questions:

- \* Can ASNO supply a list of all cases when Australia has refused third party transfers?
- \* Can ASNO confirm that Australia has never once refused permission for plutonium separation (reprocessing) or high enrichment?

## **7 ADMINISTRATIVE ARRANGEMENTS**

ASNO's John Carlson told the 4/9/06 JSCOT hearing that he would table an outline of what is in administrative arrangements (AA) and that they address notification procedures, accounting procedures, the types of reports that have to be made to Australia and how the reports are put together. The reason for refusing to make public the full details is because of "the request by some of our treaty partners" not to release the details, and the details of AAs with countries willing to have the details released does not occur because "Because that would then reveal the content of the ones that we are not publishing. They are all very similar."

Questions:

- \* What possible reason could a uranium customer country have for being unwilling to have the details of Administrative Arrangements made public?
- \* Why has DFAT/ASNO (or why have successive governments) bowed to the request of some countries to keep AA details secret?
- \* Is China willing to have details of its AA with Australia published in full when it is completed?

The Australian government's (ASNO/DFAT) 'National Interest Analysis' states that AAs "facilitate effective implementation of the Agreement" and are therefore of some importance though they are of less-than-treaty status.

Recommendation:

- \* The JSCOT should insist on viewing the Administrative Arrangement, when it is completed, and this should occur before JSCOT completes its inquiry.

The April 3, 2006 Australia/China agreement, Article X, states: "The Administrative Arrangement ... may be changed with the mutual consent in

writing of the designated authorities of both Parties."

Question: Who must approve changes to Administrative Arrangements?

## **8 URANIUM DISPLACEMENT**

China has insufficient uranium for both its civil and military nuclear programs, as the Chinese ambassador to Australia acknowledged in a December 2005 speech.

Therefore, Australian uranium sales would free up China's limited domestic reserves for the production of nuclear WMD. To argue otherwise – as the government and the so-called safeguards office ASNO do – is disingenuous. As the Taipei Times editorialised on January 21, 2006: "Whether or not Aussie uranium goes directly into Chinese warheads – or whether it is used in power stations in lieu of uranium that goes into Chinese warheads – makes little difference. Canberra is about to do a deal with a regime with a record of flouting international conventions."

DFAT states in its frequently asked questions:

Q: Won't supply of Australian uranium free-up China's own uranium for military use?

A: No. Uranium is not a scarce commodity – every country has uranium; if cost is no object it can even be recovered from seawater. All NWS have sufficient uranium for their military programs. The choice for a NWS is not, will it use uranium for weapons or for electricity, but rather, will it generate baseload electricity with nuclear, or coal, or gas, or hydro? China is widely believed to have ceased production of fissile material (plutonium and high enriched uranium) for nuclear weapons some years ago.

<[www.dfat.gov.au/geo/china/treaties/faq.html](http://www.dfat.gov.au/geo/china/treaties/faq.html)>

Uranium can indeed be extracted from seawater if cost is no object. But of course cost always is a consideration, however peripheral in extreme cases.

DFAT has no idea whether China has sufficient uranium for its current or projected future nuclear weapons program. The future of the nuclear weapons program is subject to many factors which cannot be accurately predicted.

It is certainly true that if the Chinese regime attempted to achieve anything remotely resembling parity with the nuclear weapons programs of the US or Russia, it would significantly deplete China's known conventional uranium reserves. ASNO's John Carlson states that about five tonnes of uranium is required

for one weapon (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee). Therefore, production of 10,000 weapons would require 50,000 tonnes of uranium. According to Carlson (4/9/06 JSCOT hearing), China's reserves are about 85,000 tonnes.

## 9 SUBSTITUTION

All of Australia's uranium exports to China could be used in nuclear weapons without even breaching the terms of the agreement – so long as an equivalent amount of nuclear material is transferred into safeguards. This reality is directly at odds with false statements made by Foreign Minister Alexander Downer.

Question:

\* Can ASNO confirm that all of Australia's uranium exports to China could be used in nuclear weapons without even breaching the terms of the agreement – so long as an equivalent amount of nuclear material is transferred into safeguards.

\* In relation to the transfer of an equivalent quantity of converted uranium in the form of uranium hexafluoride to the inventory of an enrichment facility that is under IAEA safeguards, can ASNO confirm that the IAEA may or may not actually verify that this has occurred depending on its process of selectively safeguarding facilities in Nuclear Weapons States?

This can occur because safeguards do not apply to uranium conversion facilities.

At the 4/9/06 JSCOT hearing:

Senator BARTLETT – Do the safeguards apply to uranium conversion facilities?

Mr Carlson – No, they do not. Under IAEA safeguards agreements, traditionally the so-called starting point of safeguards comes at the end of the conversion process. So IAEA safeguards procedures do not apply to conversion facilities as such. The IAEA has revised that policy with regard to non weapons states but has not sought to do so for weapons states.

Questions:

\* Why has the IAEA not sought to revise its policy in relation to conversion facilities in Nuclear Weapons States?

\* Has the IAEA's policy in relation to conversion facilities in Non-Nuclear Weapons States resulted in all such facilities being brought under safeguards?

\* Has DFAT/ASNO asked the Chinese regime if it would accept IAEA safeguards on conversion facilities?

\* Has the Australian government considered making it a condition of sale that China's conversion plant/s be brought under IAEA safeguards?

At the 4/9/06 JSCOT hearing, Carlson said: "Uranium conversion facilities are not included because these are before what is called the starting point for IAEA safeguards procedures. On receipt of uranium ore concentrate from Australia, China will add an equivalent quantity of converted uranium in the form of uranium hexafluoride to the inventory of an enrichment facility that is under IAEA safeguards. This will have exactly the same effect as if the uranium had moved through the conversion plant. AONM will remain under safeguards continuously from the enrichment stage through to fuel fabrication, use in power plants, storage and reprocessing, if that is approved at a later date."

The April 3, 2006 Australia/China agreement, Annex B, states:

"1. Uranium ore concentrates transferred to China under this Agreement shall be substituted by an equivalent quantity of converted natural uranium in the form of uranium hexafluoride in accordance with procedures set out in the Administrative Arrangement established pursuant to Article X of this Agreement.

2. Following conversion to uranium hexafluoride in accordance with paragraph 1 above, nuclear material subject to this Agreement in China shall be processed and used only in those facilities specified in the Delineated Chinese Nuclear Fuel Cycle Program."

## **10 CHINA'S NUCLEAR WEAPONS PROGRAM**

China's Communist regime maintains an active nuclear weapons program and refuses to ratify the Comprehensive Test Ban Treaty. The 2002 US Nuclear Posture Review refers to China's "ongoing modernization of its nuclear and non nuclear forces".

In 2005, Zhu Chenghu, a general in the Chinese People's Liberation Army, said: "If the Americans draw their missiles and position-guided ammunition onto the target zone on China's territory, I think we will have to respond with nuclear weapons. We Chinese will prepare ourselves for the destruction of all the cities east of Xian. Of course, the Americans will have to be prepared that hundreds of cities will be destroyed by the Chinese."

According to John Carlson, "we have no reason to believe that China is looking for nuclear material with the idea of a military expansion". (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee.) So why does the Chinese regime refuse to ratify the CTBT?

Question:

\* Why does ASNO believe China refuses to ratify the Comprehensive Test Ban Treaty?

Carlson states: "What is required for a weapons program is very small. China, in common with the other nuclear weapon states, has ample material for that purpose". (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee.)

Question:

\* Does ASNO acknowledge uncertainty as to its assessment that China has "ample material" to produce more nuclear weapons?

\* Approximately how much fissile material does ASNO believe China has stockpiled?

"[F]our of the five NWS have announced a moratorium on fissile production for weapons, and such production ceased in the 1980s or 1990s. China has not made any formal announcement, but there are indications that it concluded fissile production for weapons in the early 1990s." (John Carlson, Contemporary bilateral safeguards agreements: the Australian way, Trust & Verify, Oct 2005 – Feb 2006, Issue 122, <[www.vertic.org/assets/TV122.pdf](http://www.vertic.org/assets/TV122.pdf)>.)

Carlson states: "We have asked the Chinese if they could confirm formally that they have a moratorium on fissile production for weapons. At this stage, they have not formally confirmed that." (Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee.)

Questions:

\* Has the Chinese regime "confirmed" that it has a moratorium on fissile material production for weapons?

\* Will the Australian government permit uranium sales to China in the absence of Chinese "confirmation" of a moratorium on fissile material production for weapons?

\* Will the Australian government suspend uranium sales if the Chinese regime resumes producing fissile material for weapons?

Carlson states: "As comprehensive safeguards do not apply to NWS, confidence that the agreement will be honoured is based on judgment, taking into account a number of considerations, including ... the degree of separation of military and civil fuel cycles". (John Carlson, Contemporary bilateral safeguards agreements: the Australian way, Trust & Verify, Oct 2005 – Feb 2006, Issue 122, <[www.vertic.org/assets/TV122.pdf](http://www.vertic.org/assets/TV122.pdf)>.)



Question: Can ASNO advise as to the separation of military and civil fuel cycles in China?

## 11 REPROCESSING

It is particularly disappointing that the Australia-China treaty text envisages reprocessing – i.e. separation of weapons-useable Australian-obligated plutonium – from spent nuclear fuel irradiated in China.

Indeed the Australian government has bent over backwards to facilitate plutonium separation – it plans to grant 'programmatic' consent to the Chinese regime to separate Australian-obligated plutonium from spent fuel rather than requiring Australian consent on a case-by-case basis (or refusing consent altogether). This is detailed in Annex C of the April 3, 2006 Australia/China agreement.

This programmatic consent is to be given despite the acknowledgement in the agreement that "the separation, storage, transportation and use of plutonium require particular measures to reduce the risk of nuclear proliferation."

Annex C of the agreement states: "Australia also recognises the interest of China in predictable and practical implementation of consent rights under the Agreement, taking into account the shared non-proliferation objectives of the Parties and the long-term needs of China's nuclear fuel cycle program."

Questions:

- \* Is ASNO opposed to the stockpiling of plutonium?
- \* Would ASNO recommend that permission for plutonium separation in China be revoked in the event of China's separated plutonium stockpile consistently increasing?

## 12 CHINA'S WMD AND MILITARY EXPORTS

At the 4/9/06 JSCOT hearing:

**CHAIR** – So, to your knowledge, since China joined the NPT in 1992 there have been no transfers of nuclear material or nuclear technology from China to another country?

**Mr Carlson** – There have been transfers under safeguards. For instance, China supplied a power reactor to Pakistan under IAEA safeguards.

**CHAIR** – But only under safeguards?

**Mr Carlson** – Yes.

DFAT states "China joined the Nuclear Non-Proliferation Treaty (NPT) in 1992. Like the United States, China has signed but not yet ratified the Comprehensive Nuclear-Test-Ban Treaty (CTBT). In 2002 China ratified the Additional Protocol (AP) on strengthened IAEA safeguards, the first nuclear weapon state to do so (the UK and France have since ratified the AP, the US and Russia have signed but not yet ratified). In 2004 China joined the main nuclear export controls group, the Nuclear Suppliers Group. China has strengthened its domestic controls on the export of WMD-related items and further developed its enforcement procedures." (<[www.dfat.gov.au/geo/china/treaties/faq.html](http://www.dfat.gov.au/geo/china/treaties/faq.html)>)

However:

\* In 2001, the CIA reported that the Chinese regime had provided missile-related items to North Korea and Libya as well as "extensive support" to Pakistan's nuclear programme.

\* In 2003, the US Government imposed trade bans on five Chinese firms for selling weapons technology to Iran.

\* Amnesty International released a report in June 2006 criticising the Chinese regime for fueling conflicts with "irresponsible", secret and growing conventional arms exports to a range of human-rights abusers. According to Amnesty: "Its record in supplying arms to countries such as Iran, Myanmar (Burma), Pakistan and Sudan suggests ... a dangerously permissive approach to licensing arms exports." The report notes that China is the only major arms exporter not to sign up to any multinational agreements on arms export control. Amnesty estimates that China exports at least \$A1.33 billion worth of arms annually although the regime's extreme secrecy makes it difficult to estimate the scale of its arms exports.

Ongoing WMD-related exports are discussed immediately below.

## **13 CURRENT USA ACTION AGAINST CHINESE WMD-RELATED EXPORTS TO IRAN**

The following information is from a June 13 media release by the US Department of Treasury, titled, 'Treasury Designates U.S. and Chinese □Companies □Supporting Iranian Missile Proliferation', <[www.treas.gov/press/releases/js4317.htm](http://www.treas.gov/press/releases/js4317.htm)>:

*The Department of the Treasury designated four Chinese companies, pursuant to Executive Order 13382, an authority aimed at financially isolating proliferators of weapons of mass destruction, their supporters, and those contributing to the development*

*of missiles capable of delivering WMD.*

*The companies targeted today have supplied Iran's military and Iranian proliferators with missile-related and dual-use components," said Stuart Levey, Under Secretary for Terrorism and Financial Intelligence (TFI). "Governments worldwide are urged to take appropriate measures to ensure that their companies and financial institutions are not facilitating Iran's proliferation activities."*

*Designations under E.O. 13382, which are administered by the Treasury's Office of Foreign Assets Control (OFAC), prohibit all transactions between the designees and any U.S. person and freeze any assets the designees may have under U.S. jurisdiction.*

*The Chinese companies designated are Beijing Alite Technologies Company, Ltd. (ALCO), LIMMT Economic and Trade Company, Ltd., China Great Wall Industry Corporation (CGWIC), and China National Precision Machinery Import/Export Corporation (CPMIEC).*

*The Chinese firms have provided, or attempted to provide, financial, material, technological or other support for, or goods or services in support of, the Aerospace Industries Organization (AIO), the Shahid Bakeri Industrial Group (SBIG) and/or the Shahid Hemmat Industrial Group (SHIG), all of which were designated by President George W. Bush in the annex to E.O. 13382.*

*AIO, a subsidiary of the Iranian Ministry of Defense and Armed Forces Logistics, is the overall manager and coordinator of Iran's missile program, overseeing all of Iran's missile industries. SBIG, an affiliate of AIO, is also involved in Iran's missile programs. Among the weapons SBIG produces are the Fateh-110 missile, with a range of 200 kilometers, and the Fajr rocket systems, a series of North Korean-designed rockets produced under license by SBIG with ranges of between 40 and 100 kilometers. Both systems are capable of being armed with at least chemical warheads.*

*SHIG is responsible for Iran's liquid-fuelled ballistic missile programs, most notably the Shahab-III medium range ballistic missile, which is based on the North-Korean-designed No Dong missile and has a range of at least 1300 kilometers.*

*The U.S. Government has applied various sanctions against the four Chinese companies in the past. In 2004, the State Department imposed sanctions against all four pursuant to the Iran Nonproliferation Act of 2000 for transferring equipment and technology to Iran that was either controlled under multilateral export control lists or which had the potential to make a material contribution to WMD. Since 2003, CPMIEC has also been subject to an import ban under E.O. 12938, as amended.*

*Over the past year, LIMMT has continued to supply or attempt to supply Iran's military and missile organizations with controlled items, and ALCO has continued efforts to provide Iranian missile organizations with missile-related and dual-use components. CGWIC has also continued to provide goods to Iran's missile program. Within the last two years, CPMIEC has sold the Shahid Bakeri Industrial Group goods which are controlled under the Missile Technology Control Regime.*

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Further, DFAT's statement that "China has strengthened its domestic controls on the export of WMD-related items and further developed its enforcement procedures" would appear to be false according to the following information:

The U.S. government has applied various sanctions against the four Chinese companies in the past. In 2004, the State Department imposed sanctions against all four pursuant to the Iran Nonproliferation Act of 2000 for transferring equipment and technology to Iran that was either controlled under multilateral export control lists or which had the potential to make a material contribution to WMD. Since 2003, CPMIEC also has been subject to an import ban under another directive, Executive Order 12938, as amended. (US Bureau of International Information Programs, US Department of State, 13 June 2006, U.S., Chinese Companies Sent Missile Parts to Iran, Treasury Says, <[usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2006&m=June&x=20060613155945ajesrom5.230129e-03](http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2006&m=June&x=20060613155945ajesrom5.230129e-03)>).

Questions:

- \* Is ASNO aware of US government sanctions recently imposed by the US government against four Chinese firms for WMD-related exports?
- \* Is ASNO aware that the same four companies were subject to sanctions in 2004 under the Iran Nonproliferation Act?
- \* How does ASNO/DFAT justify the claim that "China has strengthened its domestic controls on the export of WMD-related items and further developed its enforcement procedures"?

## **14 HUMAN RIGHTS VIOLATIONS**

China's Ambassador to Australia, Madame Fu Ying, said at the Melbourne Mining Club luncheon in December 2005 that Australia needed to prove it was a "reliable" uranium supplier and that: "We don't want this trade to be interrupted by other factors." In other words, the sale of WMD feedstock in the form of uranium should not be jeopardised by concern over the Chinese regime's appalling human rights

record.

China is not a signatory to many international human rights and labour protection conventions and treaties.

According to Amnesty International, the Chinese regime is responsible for five out of every six executions carried out around the world. At least 2,468 executions were carried out in 2001 alone. According to Amnesty, China accounts for five out of every six executions carried out around the world. In 2001 alone, at least 2,468 executions were carried out. On April 11, 2001, 89 people were executed in a single day to kick-start a 'law and order' campaign and 1781 people were executed in the following three months.

Repression exists across Chinese society including the energy sector. For example, police reportedly shot and killed about 20 people who were protesting the construction of a power plant in the southern city of Dongzhou in December 2005, and Chinese officials blocked the spread of information about the event.  
<[www.infoplease.com/ipa/A0107411.html](http://www.infoplease.com/ipa/A0107411.html)>

In addition to the appalling human rights record, whistleblower protections are absent. There are examples of persecution of nuclear industry whistleblowers, such as Sun Xiaodi, who was concerned about environmental contamination at a uranium mine in north-west China and was abducted in April 2005 immediately after speaking to a foreign journalist. (See "The Case of Sun Xiaodi", China Rights Forum, 2006, <[www.hrichina.org/public/contents/27593](http://www.hrichina.org/public/contents/27593)> and other information at <[www.hrichina.org](http://www.hrichina.org)>)

The China Rights Forum article on Sun Xiaodi states, in relation to the uranium mine: "According to mine employees, not only did production continue following the official closure notice, but the pit was extended by another 50 meters. The employees say that mine leaders colluded with officials at the provincial department, bureau and prefectural levels to falsely report the mine as "exhausted," then continued secretly extracting uranium from the "abandoned" mine using migrant laborers ..."

A recent ABC report highlights the instability of Chinese society: "China's embryonic "rights protection movement" has suffered a significant setback with the imprisonment of one of its leading members, and the detention of another. The movement is a loose group of lawyers, academics and activists committed to ensuring that the legal rights enjoyed by Chinese on paper exist in the real world. But last week, a blind human rights campaigner was sentenced to four years in

prison, and another prominent civil rights lawyer was detained in what appears to be an intensifying crackdown by the authorities." (Correspondents Report, 27 August, 2006, <[www.abc.net.au/correspondents/content/2006/s1724237.htm](http://www.abc.net.au/correspondents/content/2006/s1724237.htm)>)

Questions:

- \* Does ASNO believe that AONM can be adequately safeguarded in the event of major, protracted social and political upheaval in China?
- \* Is ASNO confident that the IAEA's inspection rights would be undiminished in the event of major, protracted social and political upheaval in China?
- \* Are there examples in other countries of IAEA inspections continuing without being adversely effected by major social and political upheaval?

## **15 MEDIA CENSORSHIP**

The Chinese regime continues to tightly control the media. Of the 167 countries surveyed by Reporters Without Borders in 2005, China ranked 159th for press freedom, and China is the world's largest prison for journalists.

If diversion of AONM to China's WMD program took place, it is highly unlikely that the media would be able to uncover and report on the diversion.

## **16 ADVERSE PRECEDENT**

Uranium sales to China would set a poor precedent. Would Australia then sell uranium to *all* repressive, secretive, military states ... or just some ... or just China?

Negotiations over uranium sales to China have already been used to justify proposed sales to India, and proposals to sell to India have led to suggestions that uranium might also be sold to other countries which have not signed the NPT, namely Pakistan and Israel.

Already, Australia exports uranium to:

- \* nuclear weapons states (USA, UK, France)
- \* states which refuse to ratify the Comprehensive Test Ban Treaty (e.g. USA)
- \* states blocking progress on a Fissile Material Cut-Off Treaty (e.g. USA)
- \* states which use supposedly peaceful nuclear facilities to produce material for nuclear weapons (USA – tritium production), and
- \* states with a history of secret nuclear weapons research (e.g. South Korea).

The government has also approved uranium sales to one non-NPT state – Taiwan.

## 17 PUBLIC SAFETY & ENVIRONMENTAL CONCERNS

There are other serious concerns in addition to the potential use of Australian uranium in Chinese nuclear weapons. Wang Yi, a nuclear energy expert at the Chinese Academy of Sciences in Beijing, told the New York Times in January 2005: "We don't have a very good plan for dealing with spent fuel, and we don't have very good emergency plans for dealing with catastrophe."

It is doubtful whether the Chinese nuclear industry is operated with any more caution than its notorious coal mining industry – and there is concern among Japanese non-governmental organisations about the potential regional effects of 'China Chernobyls'.

Senate Budget Estimates, 29/5/06, Foreign Affairs, Defence and Trade Legislation Committee:

Senator ALLISON – So there was nothing in the agreement that leveraged better safety of those facilities from China for us providing them with uranium?

Mr Carlson – No, there was not. Our safeguards agreements do not deal with safety.

Senator ALLISON – Our safeguards agreements do not deal with safety?

Mr Carlson – They do not deal with safety.

According to an article in The Diplomat:

- the Lop Nur nuclear test site most likely destination for spent nuclear fuel and high-level nuclear waste
  - "The legacy of nuclear tests in Xinjiang demonstrates a pitiable attitude towards environmental protection."
  - "In 1995 the Chinese government admitted unclassified radioactive waste had been dumped on the shores of Lake Kokonr in Tibet; and in 1998 a local doctor went public with clandestine research linking high cancer rates with radiation exposure, but the central government has steadfastly refused to allow official research."
  - estimated 6,000 annual deaths in coal mining industry
  - major industrial accidents are common – state-owned enterprises enjoy virtual immunity because of protection by party officials and large private corporations often have equally strong party connections and can bribe their way out of accidents or costly improvements that are ostensibly required by law.
- (Sholto Macpherson, The China Syndrome, The Diplomat, August/September 2006, pp 30-32.)

## **18 THE DRUG DEALER'S DEFENCE**

It is claimed that Australia applies stricter safeguards than some other uranium supplier nations. However, all countries are reliant on the flawed and under-resourced safeguards system of the IAEA. Credit cannot be claimed for bilateral provisions since the key provisions – on enrichment and reprocessing – have never once been invoked.

Which leaves apologists of uranium exports to the Chinese regime with one last argument – that 'we' might as well sell uranium to the Chinese regime since the only alternative is that other suppliers will fill the gap. That argument lacks moral foundation and it is also false – Australia could and should encourage the Chinese regime to pursue renewable energy options and energy efficiency measures rather than nuclear expansion.

## **19 GREENHOUSE EMISSIONS**

The Australian government's (ASNO/DFAT) 'National Interest Analysis' states that: "given China's high projected growth in electricity demand, providing assistance to China to achieve environmental benefits by reducing greenhouse gas emissions through the use of nuclear power".

The Chinese regime plans to increase the contribution of renewable energy to 15% by 2020 and nuclear's contribution is expected to grow from 2% to 4% of electrical capacity over the same period. According to Carlson at the 4/9/06 JSCOT hearing: "China's nuclear power capacity in 2020 will be around 40 gigawatts, which is roughly equivalent to 40 large power reactors. This will represent four per cent of China's installed electrical capacity at that time and six per cent of China's electricity output."

Australia ought to encourage the Chinese regime to abandon the nuclear expansion and to increase the renewable target to 17% or more. There are various mechanisms to facilitate this course of action – the Clean Development Mechanism of the Kyoto Protocol, the AP6 Climate Change Framework, bilateral relations, export industry support, etc.

The argument about Australian uranium reducing greenhouse emissions conflicts with the drug dealer's defence. If the only consequence of a refusal to supply uranium to China was that other suppliers would fill demand, then refusal to supply uranium would not increase greenhouse emissions even if the reference point is coal-fired electricity plants.



## 20 COMMERCIAL INTERESTS

Uranium accounts for less than one third of one percent of Australia's total export revenue – \$573m/\$176,700m in 2005. Even with exports to China, and an expansion of Roxby Downs, and new mines, the likelihood of uranium accounting for more than 1% of export revenue is vanishingly small.

According to Carlson, predicted Chinese demand – assuming that the nuclear expansion plans are achieved – will be about 8,000 tonnes annually and Australian mines might supply about one-third of the demand, i.e. exports of the order of 2,500 tonnes annually. (4/9/06 JSCOT hearing.)

Recent exports from all Australian uranium mines have been 10-12,000 tonnes annually so Chinese demand would represent only a modest increment.

Carlson states that "at the current spot price of around \$100 a kilogram we are talking about something in the order of \$250 million a year" for uranium sales to China. (4/9/06 JSCOT hearing.) It is unlikely the spot price would be paid. In 2005, Australia exported 10,480 tonnes of uranium, worth \$573 million. At that price, 2,500 tonnes would yield \$136 million.

Even if sales of \$250 million p.a. are realised, it would represent a minor increase in overall exports to China. The Australian government's (ASNO/DFAT) 'National Interest Analysis' states that: "According to the government's documents: "China is Australia's second-largest merchandise trading partner and second largest merchandise export market. Total trade (including services) grew to \$41 billion in 2005, up from \$32 billion in 2004. Total exports grew to \$18.4 billion in 2005 – 42 per cent higher than the previous year. Resources (minerals and fuels) exports account for just over 60 per cent of merchandise exports to China."

An increment of \$250 million on exports of \$18.4 billion represents additional exports of not much more than 1%.

In 1982, Mike Rann, then a Labor researcher and now South Australian Premier, listed a number of examples of bilateral provisions being weakened. He said at the time: "Again and again, it has been demonstrated here and overseas that when problems over safeguards prove difficult, commercial considerations will come first." That pursuit of profit regardless of WMD proliferation risks clearly underpins the proposal to export uranium to China.

## **21 PROVIDING THE INCENTIVE TO PROLIFERATE AND THE WMD FEEDSTOCK**

The major driver of China's nuclear weapons program is the US-led so-called missile defence program.

By actively supporting the US missile defence program, the Australian government is partly responsible for encouraging nuclear proliferation in China.

By supplying uranium, we will potentially provide the WMD feedstock – or free up Chinese uranium for WMD.

So the Australian government is encouraging nuclear proliferation in China and now plans to supply the regime with nuclear WMD feedstock.

This is not a logical or defensible course of action.