

• THE CONSERVATION COUNCIL OF WA • THE COMMUNITY ANTI-NUCLEAR NETWORK WA •
• MEDICAL ASSOCIATION FOR THE PREVENTION OF WAR • PEOPLE FOR NUCLEAR DISARMAMENT THE AUSTRALIAN
CONSERVATION FOUNDATION • FREMANTLE ANTI NUCLEAR GROUP
• PARLIAMENTARIANS FOR A NUCLEAR-FREE FUTURE • CITIZENS FOR JUSTICE MALAWI• SOUTH WEST ANTINUCLEAR GROUP•

The Anti-Nuclear Alliance of WA ("ANAWA") congratulates the Joint Standing Committee on Treaties ("the Committee") on holding this inquiry into Nuclear Non-proliferation and Disarmament.

Introduction to ANAWA, and to the importance of the issue

ANAWA came into being in 1997 (then known as the Anti-Uranium Coalition, or AUCWA), to act as an umbrella group for organisations campaigning against the 'nuclearisation' of Australia. Our role is mainly in research, political lobbying and publication of information that we believe the community needs in order to make informed decisions about uranium mining, nuclear power, weapons and waste. We are not a "special interest group." We are the tip of the iceberg, representing the 70-80% of Western Australians who oppose uranium mining and waste dumping in Australia, particularly in our home state.

Around the world, from Taiwan to Germany to North America, people are well aware of the dangers of nuclear technology and after fifty years, have forced the industry into a decline from which it will probably never recover. Here in Western Australia, our first-hand experience is limited and we believe that people do not yet realise the dangers that these new mining proposals pose to our country.

The new Commission

We must laud the Rudd Government for establishing with Japan the International Commission on Nuclear Non-proliferation and Disarmament ("the new Commission"), which we understand will perform a similar to function to that of former Prime Minister Paul Keating's Canberra Commission on the Elimination of Nuclear Weapons. It is our hope that the new Commission will help Australia perform a much more important role at the NPT's next Review Conference ("RevCon") in 2010 than would have otherwise been possible had the Rudd Government not been elected.

We further submit that Australia should use that RevCon platform to advocate for the coming into effect, or finalisation, of the various other essential treaties we discuss below, and in particular a Nuclear Weapons Convention.

List of recommendations

Recommendation 1: The Australian Government should use the NPT's next

RevCon in 2010 to push for revisions of the NPT designed to encourage Israel, India, Pakistan and even North Korea to become member states, while not compromising the original

objectives of the NPT.

The Australian Government's role in universalising the NPT would be more plausible if we refused to stay under the USA's nuclear umbrella, and ANAWA recommends that Australia becomes proudly independent of that in the near future.

Recommendation 2: The Australian Government should use the NPT's next

RevCon in 2010 to push for revision of the NPT's technical provisions, so that advances in nuclear weapons research and development cannot be used to circumvent the language and

original intent of the NPT.

Recommendation 3: The Australian Government should make additional

contributions to the IAEA budget, and pressure other member states to make appropriate similar additional contributions.

Recommendation 4: The Australian Government should use the next RevCon to

argue for changes to the IAEA so that the agency is responsible only for NPT safeguard inspections and verifications, and no longer has a role in advocating the use

of nuclear power.

Recommendation 5: The Australian Government should maintain its stance of no

uranium exports to India, given that country is not a member

of the NPT.

Recommendation 6: The Australian Government, in view of the rationale and

recommendations of the Committee's recent inquiry into the export of uranium to Russia, should scrap the Howard Putin Australia-Russia uranium deal and not sell uranium to that

country.

Recommendation 7: The Australian Government, in view of China's poor record

of exporting certain nuclear military technologies (as well as its failure to comply with Article VI of the NPT), should not sell uranium to that country (i.e. not export uranium in accordance with the treaty entered into by the Howard

Government).

Recommendation 8: Further, the Australian Government should cease exporting

uranium to other countries that have failed to comply with

Article VI of the NPT, including the USA, the UK and France.

Recommendation 9:

In addition, the Australian Government should cease exporting uranium to countries with a history of weapons-related research based on their civil nuclear programs (such as South Korea and Taiwan).

Recommendation 10:

The Australian Government should refuse further uranium supplies to Japan until it stops accumulating enriched uranium and plutonium.

Recommendation 11:

The Australian Government should use the NPT's next RevCon in 2010 to energetically pursue signatures or ratification, or both, from the remaining nuclear capable states whose such action is necessary for the entry into force of the CTBT. In particular, the USA's participation should be pursued with the new Obama administration.

Recommendation 12:

The Australian Government should use the NPT's next RevCon in 2010 to pressure Russia to observe both the letter and intent of the NPT and CTBT by ceasing to research and develop new nuclear weapons.

Recommendation 13:

The Australian Government should use the NPT's next RevCon in 2010 to add considerably to the momentum towards establishing the FMCT, a crucially important support treaty for an effective NPT.

Recommendation 14:

The Australian Government should use the NPT's next RevCon in 2010 to seek to advance a PAROS treaty as part of its commitment to nuclear non-proliferation and disarmament.

Recommendation 15:

The Australian Government should use the NPT's next RevCon in 2010 to strongly advocate that the global community move towards establishing a NWC, as a powerful support to the ailing NPT, with the closest attention to promoting all the intermediate steps that will increase international trust and confidence towards that end.

Recommendation 16:

That, in view of the flaws inherent in the current international safeguards system, the Australian Government helps to close down the nuclear power industry by phasing out and finally stopping its uranium exports. This strategy would have to be supported by Australian Government efforts to encourage the use of renewable energy sources domestically and internationally, and enhance the global capacity for energy conservation and efficiency measures.

Recommendation 17:

ALTERNATIVELY, the Australian Government should negotiate major revisions to its uranium export treaties to properly account for the concerns raised in this submission and the 2006 report, Illusion of Protection.

Recommendation 18:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, the Australian Government should strongly support the IAEA's Additional Protocols on the grounds of their necessity for separating civilian and military uses of AONM.

Recommendation 19:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, the Australian Government should revoke its open-ended permissions, under its bilateral agreements, to separate plutonium via reprocessing, and refuse to grant such requests in future. It should also be sure never to consent to the transfer of nuclear material to a third party, or the enrichment beyond 20% U235.

Recommendation 20:

We support the recommendation in Committee's report 94 that: "Further consideration is given to the justification for secrecy of 'Material Unaccounted For'."

However we ask the Committee to make a stronger recommendation; namely, that all MUF information, past, present and future, is promptly reported publicly and that this is done on a country-by-country and facility-by-facility basis. We understand that other countries (e.g. Japan) release MUF data.

Recommendation 21:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, the Australian Government should require that all nuclear facilities processing AONM be subject both to IAEA inspections and the IAEA Additional Protocols.

Recommendation 22:

The Committee should recommend an independent public inquiry into ASNO's questionable competence and performance as per the recommendation of the EnergyScience Coalition (<<u>www.energyscience.org.au</u>>, Briefing Paper #19).

Recommendation 23:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, and subsequent to our Recommendation 22 review (and we anticipate, later overhaul) of ASNO, we recommend that the Australian Government properly address the problem of ASNO's past underfunding to ensure it can properly perform its required function.

Recommendation 24:

We recommend that the Australian Government lend strong support to Dr El Baradei for his proposal for a five-year moratorium on the construction of new enrichment and reprocessing facilities, and also to develop options for multinational control of sensitive nuclear facilities. Currently, there are many such facilities beyond the capacity of the IAEA to inspect.

The NPT

Expanding the reach of the NPT

The treaty on the Non-Proliferation of Nuclear Weapons (usually known as the "NPT"), which came into force in 1970, is arguably the key international treaty relating to nuclear disarmament. Only the NPT requires its members to work, in good faith, towards disarming themselves of nuclear weapons, if they possess them, and if they do not, the treaty commits them not to develop them. ¹

When China became a Nuclear Weapons State ("NWS") in 1964 it increased the international political appetite for formal commitments for disarmament, and indeed the NPT became signable just a few years later in 1968. The five original NWSs signed the NPT in that capacity (i.e. with a commitment to disarm). All other countries signed on as non-NWSs (i.e with a commitment not to acquire nuclear weapons). Israel, India and Pakistan did not sign, and have all subsequently developed their own nuclear weapons-capacity, which thereby creates an apparent legal barrier to their membership. South Africa, despite its membership of the NPT, had for a time a secret nuclear weapons development program, but has since rid itself of those weapons. There are clearly means of avoiding the NPT's current regulatory body, but more on that topic later.

The NPT now includes all but four of the world's countries. Israel, India and Pakistan have never been signatories, and North Korea withdrew its membership in the lead up to its first nuclear test (in 2006). Iran is a member state, which is on the face of things a positive situation, but membership of course confers a right to develop "nuclear energy for peaceful purposes". This right in turn gives Iran the capacity to enrich nuclear fuel to produce

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¹ Treaty on the Non-Proliferation of Nuclear Weapons, Article VI, for example, says "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."

² They cannot be recognised as NWS under the treaty as they did not achieve that status prior to 1 January 1967; *Treaty on the Non-Proliferation of Nuclear Weapons*, Article IX (paragraph 1 contemplates new parties being added after the treaty comes into force, but paragraph 3 means that such "late entry" states with nuclear weapons cannot be treated as NWSs under the treaty).

³ Treaty on the Non-Proliferation of Nuclear Weapons, Article IV.

weapons-grade material, and there is much concern in the international community that it is doing just that.⁴

Concerns about Iran are just one example of a long-standing problem with the NPT and the nuclear industry in general. Of all energy sources, only uranium can be directly and repeatedly linked to nuclear weapon proliferation. Sixty countries in the world have built either nuclear power or research reactors, and of those over 20 have used that infrastructure to (openly or otherwise) conduct research into, or to produce, nuclear weapons. 'Only' ten countries have built nuclear weapons, with five⁵ of those having used their 'civil' programmes to provide the necessary facilities and materials.

Al Gore noted in 2006: "For eight years in the White House, every weapons-proliferation problem we dealt with was connected to a civilian reactor program. And if we ever got to the point where we wanted to use nuclear reactors to back out a lot of coal ... then we'd have to put them in so many places we'd run that proliferation risk right off the reasonability scale."

In addition, there are often overlaps between civilian and military uses of nuclear facilities in the programmes of the five original NWSs (e.g. the Tricastin plant in France deals with both applications of nuclear technology). There is absolutely no guarantee that Australian origin uranium oxide does not end up in the nuclear weapons programmes of those of our export recipients that are NWSs; see further our sections below on the IAEA, the proposed FMCT, and the issue of export 'safeguards.'

Recommendation 1:

The Australian Government should use the NPT's next RevCon in 2010 to push for revisions of the NPT designed to encourage Israel, India, Pakistan and even North Korea to become member states, while not compromising the original objectives of the NPT.

Clearly such a move will require 'informal' work with those states, in the lead up to the RevCon, about the sorts of wording changes that would potentially achieve that outcome. The Australian Government should apply strong international pressure (including via the prospect of economic sanctions, if it should come to that) to Israel, India, Pakistan and North Korea, in order to convince those states to come within the reach of the thus amended NPT.

It is impossible to determine, without speaking to the above countries, the exact wording changes that would achieve the above objectives. But, assuming it would not be productive to seek that those states quickly divested themselves completely of their nuclear arsenals and then joined the NPT regime, what would appear to be needed instead is to amend the NPT to allow for the 'quick' and conditional future entry of Israel, India, Pakistan and North Korea as NWSs. This proposed new

⁴ See for example *The West Australian*, 24 February 2009, page 17.

⁵ Namely India, Pakistan, Israel, South Africa and North Korea.

category of NWSs (perhaps to be termed "late entry NWSs" or something similar) would then become subject to the NPT's disarmament commitments, including the commitment to negotiate a further treaty on the 'details' of disarmament (for which see further the NWC proposal below).

In making the above recommendation, we are conscious of the recent move of the IAEA Board of Governors when, on 1 August 2008, they approved an IAEA-India safeguard agreement. While we acknowledge the potential for this agreement to strengthen nuclear non-proliferation efforts, it is a weak substitute for the prospect of India coming into the actual NPT regime (we note, for example, that many of India's nuclear reactors will be exempted from IAEA inspections under the safeguard agreement). Indeed, such agreements arguably undermine the importance of the NPT. India's potential future membership of the NPT becomes particular important when one has regard to the worsening India-Pakistan relationship.

The Australian Government's role in universalising the NPT would be more plausible if we refused to stay under the USA's nuclear umbrella, and ANAWA recommends that Australia becomes proudly independent of that in the near future.

Modernising the NPT

The NPT of course requires other similarly important modifications at the next RevCon, or soon thereafter.

Much has moved on in nuclear weapons research and development since the NPT was first drafted. It must be remade to effectively address these changes in nuclear weapons technology. For instance, the amounts of fissile material and the percentage of enrichment now required to build a nuclear bomb is very significantly less than the thresholds of the 1960s when the NPT was drafted. NWSs can get around certain NPT provisions by conducting "sub-critical" nuclear tests. We commend to the Committee *An Illusion of Protection*, a publication by Medical Association for Prevention of War, for further similar information on the deficiencies in the NPT.⁶

We note that in 2006 Kevin Rudd, then Shadow Minister for Foreign Affairs, stated that "the NPT disintegrates before our very eyes ... the current non-proliferation regime is fundamentally fracturing. The consequences of the collapse of this regime for Australia are acute." This view of our now Prime Minister we trust will translate into Australia's energetic and effective promotion of non-proliferation and nuclear disarmament through an updated version of the NPT.

7

⁶ Available on a number of websites including http://www.foe.org.au/anti-nuclear/issues/oz/u/safeguards/illusion/illusion of protection full3.5MB.pdf.

We note the new Obama administration's commitment to 'strengthen' the NPT; see further Annexure 1.

Recommendation 2: The Australian Government should use the NPT's next

RevCon in 2010 to push for revision of the NPT's technical provisions, so that advances in nuclear weapons research and development cannot be used to circumvent the language and

original intent of the NPT.

Reform of, and a funding boost to, the IAEA

The International Atomic Energy Agency ("IAEA") performs the vital function of monitoring all NPT member states. The IAEA's system of 'safeguards' is intended to prevent the diversion of uranium from civilian nuclear power facilities into nuclear weapons programs. However, only a fraction of safeguards-eligible nuclear facilities and stockpiles are actually inspected by the IAEA. According to the Director General of the IAEA, Dr Mohamed El Baradei, the IAEA's basic rights of inspection are "fairly limited", the safeguards system suffers from "vulnerabilities" and "clearly needs reinforcement", and it runs on a "shoestring budget ... comparable to a local police department."

The IAEA safeguards system has no authority or capacity to prevent nuclear weapons proliferation. At best, it can detect diversion of nuclear materials after the event. To give one example (of many) of a vital IAEA failure, the IAEA was completely unable to detect the massive nuclear weapons program in Iraq from the 1970s to 1991, including the misuse of 'safeguarded' nuclear facilities.

Australia should, as long as this country is a supplier of nuclear materials to any country, insist on the upgrading of this agency, which unfortunately has the totally contradictory roles of both promoting and policing the nuclear industry. To that end, Australia's pitiful contribution to the IAEA budget should be increased.

See further our sections below on the proposed FMCT, and the issue of export 'safeguards.'

Recommendation 3: The Australian Government should make additional

contributions to the IAEA budget, and pressure other member states to make appropriate similar additional contributions.

Recommendation 4: The Australian Government should use the next RevCon to

argue for changes to the IAEA so that the agency is responsible only for NPT safeguard inspections and verifications, and no longer has a role in advocating the use

of nuclear power.

We consider the IAEA's current "two hats" constitute an internalised conflict of interest; the agency should be suspicious of the use made of civilian nuclear facilities, but it also has a role in advocating for the use of civilian nuclear power.

⁷ Statements posted at <u>www.iaea.org/NewsCenter/Statements/index.html</u>.

Uranium exports at least based on international behaviour

We congratulate the Rudd Labor Government for having policy that includes a commitment to "strengthen export control regimes, and the rights and authority of the IAEA, and tighten controls on the export of nuclear material and technology." Importantly, the policy also commits the Government to "only allow export of Australian uranium to countries which observe the NPT and which are committed to non-proliferation and nuclear safeguards." We applaud the decision to implement this policy by refusing exports of uranium to India, but urge that the above policy be applied on a far more appropriate (and broader) basis.

Australia has uranium export agreements with:

- * four of the 'declared' NWSs (USA, UK, China, France), none of which are complying with their disarmament obligations under the NPT;
- * countries with a history of weapons-related research based on their civil nuclear programs (such as South Korea and Taiwan)
- * countries blocking progress on the CTBT (e.g. the USA) and the proposed FMCT; see further below.

The potential for uranium sales to China sets another precedent: dealings with undemocratic, secretive states with appalling human rights records.

The government has not (yet) ruled out uranium sales to Russia despite the fact that there have been no IAEA safeguards inspections in Russia since 2001; Russia is undemocratic and secretive; and human rights abuses are widespread. Incidents of theft / smuggling from Russian nuclear sites are common, and Russia is in violation of its disarmament obligations under the NPT.

All of the following recommendations assume Australia continues to engage in uranium exports, at least in the short term, although we note our Recommendation 16 that our involvement in this fundamentally unsustainable industry should be phased out.

Recommendation 5: The Australian Government should maintain its stance of no

uranium exports to India, given that country is not a member

of the NPT.

Recommendation 6: The Australian Government, in view of the rationale and

> recommendations of the Committee's recent inquiry into the export of uranium to Russia, 8 should scrap the Howard Putin

⁸ Joint Standing Committee on Treaties, Report 94, tabled in Parliament on 18 September 2008, recommendation 1, available at http://www.aph.gov.au/house/committee/jsct/14may2008/report1/front.pdf

Australia-Russia uranium deal and not sell uranium to that country.⁹

Last year the Committee recommended that uranium exports to Russia should not proceed unless the safeguards arrangements are greatly strengthened and other serious concerns are satisfactorily addressed. Thus we have some hope that the Committee will now consider the broader problems with safeguards and Australia's uranium export industry.

Recommendation 7:

The Australian Government, in view of China's poor record of exporting certain nuclear military technologies (as well as its failure to comply with Article VI of the NPT), should not sell uranium to that country (i.e. not export uranium in accordance with the treaty entered into by the Howard Government).

The existing China deal fails the test of the Recommendations of the *An Illusion of Protection* report referred to above, and also fails the test of compliance with the Committee preconditions set on the proposed Russia deal.

Recommendation 8:

Further, the Australian Government should cease exporting uranium to other countries that have failed to comply with Article VI of the NPT, including the USA, the UK and France.

We note here the prospect that the Obama administration's policies (see Annexure 1) will bring additional attention to NPT compliance, although it would be surprising indeed if the USA's new international activities were to involve admitting to their own lack of compliance!

Recommendation 9:

In addition, the Australian Government should cease exporting uranium to countries with a history of weapons-related research based on their civil nuclear programs (such as South Korea and Taiwan).

⁹ We note that Prime Minister Putin, when President, announced that Russia was researching new nuclear weapons and widening their reach through more advanced missiles and the country's submarines and bombers. Such advances are prohibited under the NPT. The collapse of the Warsaw Treaty and the increasing spread of NATO including states once held within Russia's sphere of influence, and the USA's plans for a missile defence system based in Poland and Czech Republic, are of concern to Russia. Its response to the situation in South Ossetia / Georgia and the more recent cutting off of Russian gas supplies to Ukraine are examples of Russian determination to hold power against the advances of the West. President Medvedev has announced that Russia will strengthen its military capacity, adopt new types of weapons, and continue to test traditional ballistic missiles in service. He stated that these missiles remained effective and "that our shield is in order" (*The Australian*, 13.10.08).

Recommendation 10:

The Australian Government should refuse further uranium supplies to Japan until it stops accumulating enriched uranium and plutonium.

As the only country to have experienced nuclear warfare, and notwithstanding its pacifist constitution, some politicians in Japan have expressed the desire for that country to develop its own nuclear weapons. Some of Japan's growing mixed oxide (often known as "MOX") fuel reserves have been derived from Australian uranium. Accumulation of these reserves is concerning for some of Japan's neighbours. Our country should encourage Japan to expand its renewable energy capacity rather than spending time and money potentially contributing to a regional nuclear arms race.

See further our sections below on the proposed FMCT, and the issue of export 'safeguards.'

The CTBT

The Comprehensive Nuclear-Test-Ban Treaty (usually known as the "CTBT") is an essential support treaty to the NPT. The CTBT bans all nuclear weapon test explosions (or any other nuclear explosion), establishes an extensive International Monitoring System, and allows for short-notice on-site inspections. It was opened for signature in 1996, but has not yet entered into force. Under the terms of the treaty, all forty-four countries with nuclear power plants must sign and ratify it before it enters into force.

The precursor to the CTBT was a Partial Test Ban Treaty ("PTBT"), developed in 1963. This limited treaty banned all but underground nuclear explosions. As the name suggests, the CTBT was developed to be more comprehensive than its precursor, but has faced continued problems with key nations refusing to ratify, including the United States, China, Israel, India and Pakistan, all countries which have nuclear weapons.

The CTBT has been signed by 177 countries and ratified by 144. Of the 44 nuclear capable states whose ratification is essential for the entry into force of this treaty, 38 have ratified, but 3 have not even signed it. Australia has signed and ratified the CTBT.

While the USA has signed it, it has not ratified this important treaty. The USA has used subcritical tests and simulation techniques to maintain its nuclear stockpile – and has developed "mini-nukes," bunker busters and new technology delivery systems. We note that the USA's sub-critical tests in particular have been used by India to refuse to take steps to support the CTBT. Australia has tried in the past to convince the USA to take the step of ratifying the CTBT. With Barack Obama as President, such efforts might well have more success, although we are not aware of explicit promises for such ratification; see Annexure 1.

Russia is advancing its nuclear arsenal with "new weapons" and could well be in breach of (at least the spirit of) the NPT and CTBT obligations by engaging in sub-critical testing.

Recommendation 11:

The Australian Government should use the NPT's next RevCon in 2010 to energetically pursue signatures or ratification, or both, from the remaining nuclear capable states whose such action is necessary for the entry into force of the CTBT. In particular, the USA's participation should be pursued with the new Obama administration.

The Australian Government should apply strong international pressure to achieve the above (including via the prospect of economic sanctions, if it should come to that).

Recommendation 12:

The Australian Government should use the NPT's next RevCon in 2010 to pressure Russia to observe both the letter and intent of the NPT and CTBT by ceasing to research and develop new nuclear weapons.¹⁰

The Australian Government should apply strong international pressure to achieve the above (including via the prospect of economic sanctions, if it should come to that).

The FMCT

Since the signing of the NPT, a significant issue for the disarmament and arms control community has been the continued production of fissile materials - the fuel for nuclear weapons. Many states have long been calling for a ban on the production of fissile materials.

In December 1993, the UN General Assembly adopted by consensus a resolution recommending the negotiation of a non-discriminatory, multilateral, and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices - which became known as a Fissile Material Cut-off Treaty (FMCT).

This treaty is still in negotiation and has not yet opened for signing or ratification, though there is a growing political will to advance the idea in negotiations at the UN Conference on Disarmament ("UNCD").

See further our section below on the issue of export 'safeguards.'

Recommendation 13:

The Australian Government should use the NPT's next RevCon in 2010 to add considerably to the momentum towards establishing the FMCT, a crucially important support treaty for an effective NPT.

Once in existence, and if well-supported by a strengthened IAEA, the FMCT would be a most powerful instrument in

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¹⁰ See again footnote 9.

preventing obtainment of fissile material for production of new nuclear weapons.

PAROS

The proposed Prevention of an Arms Race in Outer Space (or "PAROS") treaty is another treaty-in-the-wings, despite efforts for decades to bring it into existence and a very great deal of international support. Its purpose would be to prevent the placement of weapons in outer space. If achieved, this would build significantly on arms transparency and become a powerful confidence-building measure.

While China and Russia have submitted a draft PAROS treaty, both have used their past space research and development capacity to explore military advances in space, claiming that this has been in response to the leadership of the USA in that direction. Russia's Sputnik back in 1956 goaded the USA to pour vast additional resources into space exploration. For most of the world's people, these actions were interpreted as having military purposes (among other more benign objectives).

The appalling wastage of resources in the race to dominate military use of space could be stymied if PAROS could become a reality under a trusted and effective international inspection and verification regime. The despairing prospect of a future war (involving nuclear weapons, lasers, electronic jammers and so on) on Earth using space would fade from our minds as space research would be confined to building multilateral cooperation for peaceful uses of outer space.

Recommendation 14:

The Australian Government should use the NPT's next RevCon in 2010 to seek to advance a PAROS treaty as part of its commitment to nuclear non-proliferation and disarmament.

Other strategies to advance nuclear disarmament

The NPT was supposed to have achieved its aims of preventing nuclear proliferation and achieving nuclear disarmament in its first 25 years. At the 1995 RevCon, it became devastatingly clear that this timetable was not to be met. Since then, the NPT has undergone a RevCon every five years. At the 2000 RevCon there was reason to hope, as its final resolve was that countries make an unequivocal commitment to thirteen practical, incremental, verifiable steps leading to absolute nuclear disarmament. The 2005 RevCon was deeply disappointing, failing to agree to move forward on these 'steps,' and indeed going backwards.

The NWC

A Nuclear Weapons Convention ("NWC") is a proposed treaty to ban nuclear weapons and ensure their elimination. It would provide powerful support to the ailing NPT. Importantly, a NWC would work to strengthen the NPT by laying out a systematic program to achieve the goal of the NPT for NWSs to disarm themselves of nuclear weapons.

Countries are legally required to negotiate such a treaty, ¹¹ and experts have already produced a draft text. They argue that an NWC is more likely to succeed than a series of fragmented and inconsistent approaches to nuclear disarmament.

The draft treaty is modelled on similar conventions outlawing chemical weapons, biological weapons and anti-personnel landmines. It would complement rather than undermine existing nuclear weapons treaties such as the NPT and the CTBT. It is feasible, necessary and long overdue.

What would it do?

The NWC would prohibit the development, testing, production, stockpiling, transfer, use and threat of use of nuclear weapons, as well as the production of fissile material suitable for making them (either highly enriched uranium or separated plutonium). It would require all nuclear-armed countries to destroy their nuclear weapons in stages (see below), the last stage being to place all fissile material under international control to prevent nuclear weapons ever being made again.

How would it be verified?

The NWC would establish an agency to ensure that countries comply with the terms of the treaty. This body would receive progress reports from nuclear-armed states, conduct inspections of weapons facilities, acquire data via satellite photography and remote sensors, and monitor the production and transfer of materials suitable for making nuclear weapons.

How would it happen?

- 1. Take nuclear weapons off hair-trigger alert.
- 2. Remove nuclear weapons from deployment.
- 3. Remove the warheads from their delivery vehicles.
- 4. Disable the warheads by removing the explosive "pits."
- 5. Place the fissile material under UN control.

A model NWC

A Model NWC was accepted in 1997 as a UN discussion draft document. In 2007, the International Physicians for Prevention of Nuclear War and partner organisations launched a revised edition of the Model NWC. It reflects on the changed global security environment and answers critical questions relating to the process of nuclear disarmament. Please see their publication, *Securing Our Survival: The Case for a Nuclear Weapons Convention*. ¹²

¹¹ Treaty on the Non-Proliferation of Nuclear Weapons, Article VI.

¹² Available at www.ican.org/securingoursurvival.

We are very encouraged by the existence of this draft Model NWC. Also encouraging is other international law banning other weapons of mass destruction – the Chemical Weapons Convention, ¹³ the Biological Weapons Convention ¹⁴ and the Landmines Ban Treaty ¹⁵ (Anti-Personnel Landmines have been described as WMD in slow motion). Nuclear weapons are far more harmful to life on Earth than any of these other weapons in terms of scale and time. The need for a NWC is greater than all other weapons ban treaties and creating an effective, transparent, verifiable NWC is one of the greatest and most urgent tasks the world faces now. ANAWA strongly supports ICAN, the International Campaign to Abolish Nuclear weapons, and believes that achieving nuclear disarmament is possible with enough international will and cooperation.

Once again, the push for this new convention may be more supported by the USA since the election of President Obama. His relevant promises, extracted at Annexure 1, do not mention the proposed Convention by name, but we note that much of his platform mirrors the aspects of the NWC proposal outlined above.

Recommendation 15:

The Australian Government should use the NPT's next RevCon in 2010 to strongly advocate that the global community move towards establishing a NWC, as a powerful support to the ailing NPT, with the closest attention to promoting all the intermediate steps that will increase international trust and confidence towards that end.

The NPT RevCon 2010 will be a great platform for this advocacy. Before it and beyond it, there will be plenty of need for diplomatic work related to advancing this great cause and we want Australia, freshly 'armed' by the recommendations of its new Commission, to take a powerful leadership role in that. The NPT's Preparatory Committee meeting in May 2009 will also be very important. The push for a NWC is very much consistent with the 13 Step action plan that arose from the NPT RevCon 2000, and Australia should raise these steps at the RevCon and urge that progress be made on their implementation. These steps include the "unequivocal undertaking by the NWSs to accomplish total abolition of their nuclear arsenals."

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¹³ Full title "Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction."

¹⁴ Full title "Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction."

¹⁵ Full title "Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines, and on their Destruction."

Briefly, the Steps are:

- 1. Achieving the remaining signatures and ratifications in order for the CTBT to enter into force.
- 2. A moratorium on nuclear weapons tests, or any other nuclear explosions, while the above is being achieved.
- 3. Effective negotiations via the UNCD to achieve the FMCT.
- 4. Through the UNCD, establishing a body with a mandate to deal with nuclear disarmament.
- 5. Establishing the principle of irreversibility in nuclear disarmament measures.
- 6. An unequivocal undertaking by the NWSs to accomplish total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under NPT Article VI.
- 7. Early entry into force and full implementation of the second, and conclusion of the third, Treaties on the Reduction and Limitation of Strategic Offensive Arms (usually known as the second and third Strategic Arms limitation Treaties, or "START, II and III") while preserving and strengthening the Anti-Ballistic Missile Treaty ("ABMT"). Note: Since 2000 the ABMT, which was a bilateral treaty between the USA and old Soviet Union, failed to survive the advances in ballistic missile defence planned or achieved by the USA and Russia. As Ballistic Missile Defence research and development continues, it is highly necessary for an ABMT to be reestablished.
- 8. Completion and implementation of the Trilateral Initiative between the USA, the Russian Federation and the IAEA.
- 9. Based on principle of undiminished security for all, steps must be taken by all NWSs leading to total nuclear disarmament so that international stability is promoted. This will require increased transparency by the NWSS to build confidence. Concrete measures must be undertaken to reduce operational status of nuclear weapons systems. Note: ANAWA values Australia's recent UN vote in favour of removing nuclear weapons from high alert status.

- 10. NWSs must place fissile materials no longer to be used in military programs, under IAEA control, or other relevant international verification, and arrangements must be made for disposition of such materials for peaceful purposes.
- 11. Re-affirmation by state parties that the ultimate objective is general and complete disarmament under effective international control.
- 12. Regular reports within the NPT framework, on implementation of Article VI by all States parties.
- 13. Further development of verification capabilities needed to provide assurance of compliance with nuclear disarmament agreements to achieve and maintain a nuclear weapons-free world.

Australia's uranium exports

Bilateral 'safeguards'; an Illusion of Protection

In addition to IAEA 'safeguards' (such as they are), countries buying Australian uranium must sign a bilateral agreement. At present, Australia has 22 bilateral safeguards agreements in place, providing for the transfer of Australian Obligated Nuclear Materials ("AONM") to up to 39 countries, plus Taiwan. However, there are no Australian inspections of nuclear stockpiles or facilities using AONM. Australia is entirely reliant on the partial and underfunded inspection system of the IAEA.

There is increasing recognition of the fundamental flaws and limitations of the international nuclear safeguards system. While there is much that can be done to improve this system, fundamental flaws and pervasive interconnections between civil and military applications of nuclear technologies and materials mean that the most responsible position is to phase out uranium mining and export of uranium, and globally wind down involvement in the nuclear industry.

Such was the finding of the 2006 report, *Illusion of Protection*. The report, produced by MAPW and the Australian Conservation Foundation, provides a background on the history and current status of the nuclear non-proliferation and disarmament measures internationally as well as an overview of the history of Australia's record with safeguards.

It goes on to explore the current international safeguards systems, how they are designed to work, and the inherent difficulties and flaws in them. It also profiles the attempts of the IAEA to strengthen safeguards through Additional Protocols, and the problems they face. Although the report makes a case specifically against sales of Australian uranium to China, the lessons and problems outlined are applicable to any plans to sell uranium to India or any other state with nuclear weapons programs or ambitions.

If signatories of the NPT faithfully honoured their obligations under the treaty, and it could be proved that they did so, we could be confident that no AONM would be used for their military nuclear weapons programs. However, this is not the case. Civilian nuclear power reactors have been used time and time again in clandestine programs to obtain fissile materials for military purposes. Furthermore, it is too difficult for the under-resourced IAEA to ensure that safeguards are adhered to.

The scale of the safeguards challenge is ever-increasing

A further difficulty safeguarding AONM is its quantity, the variety of its forms, and the variety of locations and circumstances in which it is held. As at 31/12/07, AONM held overseas comprised:

Depleted Uranium (EU, Japan, South Korea, USA) 87,249 tonnes Natural Uranium (Canada, EU, Japan, South Korea, USA) 21,475 tonnes Uranium in Enrichment Plants (EU, Japan, USA) 18,217 tonnes Low Enriched Uranium (Canada, EU, Japan, Mexico, South Korea, Switzerland, USA) 12,110 tonnes Plutonium (Canada, EU, Japan, Mexico, South Korea, Switzerland, USA) 114.3 tonnes

Total: 139,165 tonnes

Accounting discrepancies involving AONM are common

Nuclear accounting discrepancies are commonplace and inevitable due to the difficulty of precisely measuring nuclear materials. The accounting discrepancies are known as Material Unaccounted For ("MUF"). As the Australian Safeguards and Non-proliferation Office ("ASNO") concedes: "Every year inventory reports involving bulk material will include a component of MUF."

This problem of imprecise measurement provides an obvious loophole for diversion of nuclear materials for weapons production. In a large plant, even a tiny percentage of the annual through-put of nuclear material will suffice to build one or more weapons with virtually no chance of detection by IAEA inspections - if indeed the IAEA carries out any inspections at all.

Australia's uranium has resulted in the production of over 114 tonnes of plutonium - sufficient for over 11,000 nuclear weapons. If just 0.1% of this plutonium is written off as MUF, that is sufficient for 11 plutonium bombs similar to that which destroyed Nagasaki. Government agencies refuse to release MUF figures; for plutonium, it may well be significantly greater than 0.1%. In 2005, 29.6 kg of Sellafield's plutonium stock could not be accounted for.

We note again the Rudd Government's policy commitments, quoted above, which includes a promise to "strengthen export control regimes," and trust that this quickly translates into meaningful action.

Recommendation 16: That, in view of the flaws inherent in the current

international safeguards system, the Australian Government helps to close down the nuclear power industry by phasing out and finally stopping its uranium exports. This strategy would have to be supported by Australian Government efforts

to encourage the use of renewable energy sources

domestically and internationally, and enhance the global capacity for energy conservation and efficiency measures.

Recommendation 17: ALTERNATIVELY, the Australian Government should

negotiate major revisions to its uranium export treaties to properly account for the concerns raised in this submission

and the 2006 report, Illusion of Protection.

Recommendation 18: Assuming the Committee does not recommend the phased

cessation of uranium exports as per our Recommendation 16, the Australian Government should strongly support the IAEA's Additional Protocols on the grounds of their necessity

for separating civilian and military uses of AONM.

Australia's flawed regulator; ASNO

At the Australian end of this international trade in uranium we have ASNO, which oversees our uranium exports and produces audits. The receiving country is also supposed to provide records of these transactions and report regularly. If the receiving party is engaged in a clandestine weapons program, it is unlikely to be transparent about any AONM being diverted to that. Similarly the receiving party will have no incentive at all to disclose whether obtaining the AONM is releasing uranium sourced from elsewhere for its overt or covert weapons programs.

In any case, it seems that the conditions in bilateral agreements are rarely utilised. The most important provisions in bilateral agreements are for prior Australian consent before Australian nuclear material is transferred to a third party, enriched beyond 20 per cent uranium-235, or reprocessed. However, no Australian government has ever refused permission to separate plutonium from spent fuel via reprocessing (and there has never been a request to enrich beyond 20 per cent U-235). Even when reprocessing leads to the stockpiling of plutonium (which can be used directly in nuclear weapons), open-ended permission to reprocess has been granted by Australian governments. Hence there are stockpiles of "Australian-obligated" separated plutonium in Japan and in some European countries.

Making this system effective depends on eternal vigilance on the part of Australian authorities, and absolute honesty and transparency on the part of receiving countries. These high standards are not always attainable – and when not achieved, the consequences, more nuclear weapons, can have the direct consequences for life on Earth. A number of other key concerns with ASNO's role in the safeguard process appear below.

Australia's uranium exports are shrouded in secrecy

Some examples of indefensible secrecy by ASNO include the refusal to publicly release:

- * 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 MUF including the volumes of nuclear materials, the countries involved, and the reasons given to explain accounting discrepancies.

Australia does not require that all nuclear facilities processing AONM be subject to IAEA inspections

Only a fraction of the facilities which are safeguards-eligible are inspected by the IAEA, ¹⁶ and worse still Australia allows the processing of Australian uranium in facilities which are not covered by IAEA safeguards at all.

While AONM is meant to be subject to IAEA safeguards from the enrichment stage onwards, ASNO is willing to make exceptions; for example ASNO has recommended that the Australian government agree to the processing of Australian uranium in an unsafeguarded enrichment plant in Russia.

ASNO has exhibited questionable competence and performance

ASNO has established a track record of questionable competence and performance. Last year, ASNO misled the Committee with claims that safeguards will "ensure" that Australian uranium is not used for weapons production in Russia even though there have been no safeguards inspections in Russia since 2001 (a fact which ASNO conspicuously failed to provide to the Committee).

ASNO falsely claims that nuclear power does not present a weapons proliferation risk; that Australia sells uranium only to countries with "impeccable" non-proliferation credentials; and that all AONM is "fully accounted for".

Recommendation 19:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, the Australian Government should revoke its open-ended permissions, under its bilateral agreements, to separate plutonium via reprocessing, and refuse to grant such requests in future. It should also be sure never to consent to the

¹⁶ "Lax nuclear safeguards pose a key threat for Australia and the world," by Professor Jim Falk and Dr Bill Williams, published in *The Advertiser* on 22 April 2008, reproduced at http://www.foe.org.au/anti-nuclear/issues/oz/u/safeguards/scientists-drop-a-nuclear-bombshell/.

transfer of nuclear material to a third party, or the enrichment beyond 20% U235.

Recommendation 20:

We support the recommendation in Committee's report 94 that: "Further consideration is given to the justification for secrecy of 'Material Unaccounted For'." ¹⁷

However we ask the Committee to make a stronger recommendation; namely, that all MUF information, past, present and future, is promptly reported publicly and that this is done on a country-by-country and facility-by-facility basis. We understand that other countries (e.g. Japan) release MUF data.

There is no legitimate justification for the secrecy surrounding MUF. ASNO has done no better than to cite "commercial confidentiality."

Recommendation 21:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, the Australian Government should require that all nuclear facilities processing AONM be subject both to IAEA inspections and the IAEA Additional Protocols.

Recommendation 22:

The Committee should recommend an independent public inquiry into ASNO's questionable competence and performance as per the recommendation of the EnergyScience Coalition (<<u>www.energyscience.org.au</u>>, Briefing Paper #19).

Recommendation 23:

Assuming the Committee does not recommend the phased cessation of uranium exports as per our Recommendation 16, and subsequent to our Recommendation 22 review (and we anticipate, later overhaul) of ASNO, we recommend that the Australian Government properly address the problem of ASNO's past underfunding to ensure it can properly perform its required function.

ASNO is supposed to monitor about 80 tonnes of Australianobligated plutonium, enough to build around 8000 nuclear weapons. It should have resources to match this need.

Moratorium on the construction of new enrichment and reprocessing facilities

Article IV of the NPT presents a major obstacle to nuclear non-proliferation and disarmament. It gives an "inalienable right" to develop enrichment and reprocessing

¹⁷ Joint Standing Committee on Treaties, Report 94, tabled in Parliament on 18 September 2008, recommendation 1, available at http://www.aph.gov.au/house/committee/jsct/14may2008/report1/front.pdf

technologies, assuming that these capacities are separate from developing nuclear weapons. History has demonstrated otherwise. No country without nuclear power has been able to develop nuclear weapons, and that is due to nuclear reactors being the source of fissile materials if enrichment to weapons-grade material takes place.

All these problems have their genesis when uranium mining takes place. Nuclear power is an unforgiving and failed technology too dangerous to be relied upon for civilian energy generation, and too intrinsically linked to nuclear weapons capacity. No more of its radioactive wastes must be bequeathed to future generations. Its linkage to nuclear weapons is irrefutable and the only sane way to deal with nuclear power is to close it down.

Recommendation 24:

We recommend that the Australian Government lend strong support to Dr El Baradei for his proposal for a five-year moratorium on the construction of new enrichment and reprocessing facilities, and also to develop options for multinational control of sensitive nuclear facilities. Currently, there are many such facilities beyond the capacity of the IAEA to inspect.

ANNEXURE 1

Extracted from http://www.whitehouse.gov/agenda/foreign_policy/

Nuclear Weapons

- A Record of Results: The gravest danger to the American people is the threat of a terrorist attack with a nuclear weapon and the spread of nuclear weapons to dangerous regimes. Obama has taken bipartisan action to secure nuclear weapons and materials:
 - He joined Senator Dick Lugar (R-In) in passing a law to help the United States and our allies detect and stop the smuggling of weapons of mass destruction throughout the world.
 - He joined Senator Chuck Hagel (R-Ne) to introduce a bill that seeks to prevent nuclear terrorism, reduce global nuclear arsenals, and stop the spread of nuclear weapons.
- Secure Loose Nuclear Materials from Terrorists: Obama and Biden will secure all loose nuclear materials in the world within four years. While working to secure existing stockpiles of nuclear material, Obama and Biden will negotiate a verifiable global ban on the production of new nuclear weapons material. This will deny terrorists the ability to steal or buy loose nuclear materials.
- Strengthen the Nuclear Non-Proliferation Treaty: Obama and Biden will crack down on nuclear proliferation by strengthening the Nuclear Non-Proliferation Treaty so that countries like North Korea and Iran that break the rules will automatically face strong international sanctions.
- Move Toward a Nuclear Free World: Obama and Biden will set a goal of a world without nuclear weapons, and pursue it. Obama and Biden will always maintain a strong deterrent as long as nuclear weapons exist. But they will take several steps down the long road toward eliminating nuclear weapons. They will stop the development of new nuclear weapons; work with Russia to take U.S. and Russian ballistic missiles off hair trigger alert; seek dramatic reductions in U.S. and Russian stockpiles of nuclear weapons and material; and set a goal to expand the U.S.-Russian ban on intermediate-range missiles so that the agreement is global.