

## **Depleted Uranium (Prohibition) Bill – Key points**

### **Summary**

- Depleted uranium is often referred to as the Agent Orange of the 21<sup>st</sup> Century.
- There is growing international concern about the use of DU in weapons – and the unacceptable harm to military and civilian personnel exposed to its toxicity and radioactivity
- This Bill bans the development, production, acquisition, stockpiling, transfer, and use of uranium weapons within New Zealand and by agents of the NZ Government. It uses the language of the NZ's nuclear-free legislation
- The Bill applies the precautionary principle, banning the use of depleted uranium weapons until definitive research proves those exposed to depleted uranium in the battlefield are not adversely affected by its radiation and toxicity
- New Zealand has been a leader in the prohibition of nuclear weapons, landmines, and cluster munitions. We can now add our voice to the growing international movement to outlaw depleted uranium weapons.

### **What is Depleted Uranium?**

- Depleted uranium is a by-product of uranium processed for use in nuclear weapons, and nuclear power plants.
- It is extremely heavy and hard (1.7 times the density of lead) and is used as an armour-piercing munition.

### **Why is it a hazard?**

- Depleted uranium ignites on impact, burning at a very high temperature and disperses a fine radioactive dust which can pass through gas masks, so it is virtually impossible to protect against in the battlefield
- The dust is chemically toxic, causing heavy-metal poisoning
- About one-third of the 800,000 veterans of the 1991 Gulf War now claim disability benefits for mystery illnesses. DU exposure has been suggested as one of the risk factors for the syndrome.
- There was a sharp increase in cancers and child deformities in Iraq after 1991 and 2003. There have been numerous reports from Iraqi physicians of surges in cancers and birth malformations in areas where DU is thought to have been used. The use of the weapons also has a profound psychological impact on civilians.
- Although DU is only weakly radioactive the nature of that radioactivity and how it can affect living tissue and blood cells is potentially very damaging to human health. Research by the US Armed Forces Radiobiology Research Institute has found that alpha particles radiating from dust can damage DNA in vulnerable tissue leading to cancer, birth defects and other health effects.

## **Where is it used?**

- Governments have often initially denied using DU because of public health concerns. It is now clear that DU was used on a large scale by the US and the UK in the Gulf War in 1991, then in Bosnia, Serbia and Kosovo, and again in the war in Iraq by the US and the UK in 2003. It is suspected that the US also used DU in Afghanistan in 2001, although both the US and UK governments have denied using it there. However, leaked transport documents suggest that US forces in Afghanistan had DU weapons. The continued use of A10 'Warthog' aircraft in support of NATO ground troops indicates that DU may be being used there

## **Does NZ use uranium weapons? If not, what is the point of the Bill?**

- No one is suggesting the NZ Defence Forces use depleted uranium weapons. But legislation in NZ, following prohibition laws passed in Belgium and Costa Rica, would have strong symbolic value. Multiple national bans would help to build political will towards the objective of an international convention. The large majority supporting a moratorium in the European Parliament indicates a significant level of international support on this issue.

## **What does the science say?**

- The United Nations Environment Programme (UNEP) has found that DU munitions have the potential to contaminate soils and groundwater and have called for a precautionary approach to their use. Laboratory studies show that health risks from DU inhalation may be underestimated; that DU in drinking water can disrupt hormones and fertility; that it may be present in urine 20 years after inhalation; and that it is a carcinogen shown by US military researchers to cause biological effects in mice
- Dust particles from DU weapons contain high proportions of uranium. Uranium is a known carcinogen and induces birth defects. Multiple studies suggest leukemogenic, genetic, reproductive and neurological effects from chronic exposure
- Official statements claim that only "safe" low level radiation emanates from depleted uranium
- International agencies all agree that DU contaminated sites and scrap should be managed after conflict but research indicates that this presents considerable financial and technical challenges placing a significant burden on states,

## **Why don't we have the medical and scientific proof of the health effects of DU weapons?**

- To take the use of DU in Iraq as an example, the reports of surges in cancer and birth malformations have raised concerns about the use of DU there. However until full scale epidemiological studies are done it is impossible to make a direct link between these health problems and DU exposure.
- To date these complex and crucial studies have been hampered by the breakdown in health administration during and after each conflict, the massive internal

displacement of the population, ongoing security concerns and obstruction from US authorities.

- In response to these growing concerns, the WHO and Iraqi Ministry of Health recently teamed up to examine congenital birth defects in six Iraqi provinces.

### **What is the attitude of Governments who use DU weapons?**

- The US has refused to release geographical data on its use of DU weapons in 1991 and 2003. As a result at least 400 tonnes of DU munitions remain unaccounted for. Unlike for cluster munitions and landmines, there is no legal obligation on states to release information on DU use to the international community.
- The UK has demonstrated some responsibility for its use of DU in 2003 by providing the UN with coordinates of where DU munitions were used. It also part-funded a UNEP-led capacity building programme in southern Iraq.
- A small group of states (US, UK, France, Israel) is blocking international efforts to examine DU use more closely. They claim that World Health Organisation and International Atomic Energy Authority have examined the issue and have not been able to document long term health or environmental effects attributable to the use of DU. Yet neither organisation has conducted the epidemiological studies on exposed civilian populations needed to determine the health risks. The WHO has not done any significant work on DU since 2003, in which time dozens of peer-reviewed studies have been published detailing DU's potential risks.

### **Precautionary principle**

- DU use presents a clear risk to human health and the environment. This risk is increased through the use of the weapons in civilian areas and against civilian objects. The risks are further compounded by the inability of affected states to effectively manage contamination.
- Given that all isotopes of uranium are radioactive and chemically toxic, the moral onus should have been on the first users of uranium weapons over 20 years ago to prove they caused no unacceptable harm to civilians. No such proof has been presented.
- We believe that until definitive epidemiological studies are done on post-conflict exposure to radiation from DU munitions, a precautionary approach is appropriate
- The military powers who use depleted uranium have in general been secretive and obstructive to efforts to gain more knowledge about the use of DU weapons and the consequences for combatants and affected civilians.

### **Will the Bill stop NZ forces exercising or fighting alongside militaries who use DU (like the US and UK)?**

- New Zealand has legislated a ban on landmines and cluster munitions but that has not stopped NZ forces from exercising or fighting alongside the UK and the US (who have not signed up to those bans) in recent conflicts. Both laws contain interoperability provisions that would be considered and incorporated into the Bill at

select committee. An example of the interoperability provision is Clause 21 of the Cluster Munitions Convention

- NZ Defence Forces do not use DU, and then-Chief of Defence Forces Jerry Mataparae told the Foreign Affairs Select Committee in 2009 that the NZDF would prefer its allies did not use DU weapons.

### **What is the status of DU under international law?**

- There is currently no treaty or convention that prohibits the use of DU weapons, but there is an international debate on whether DU munitions are contrary to the customary principles of international law
- There is a growing view that DU weapons violate the general principles of the laws applicable to the use of weapons in armed conflict. In 1996, in a ruling from the UN High Commissioner for Human Rights, DU weapons were classed as weapons of indiscriminate effect.
- NZ's Physicians and Scientists for Global Responsibility and other international campaign groups argue that the illegality of DU weapons must be tested against the general rules governing the use of weapons under human rights and humanitarian law. Parties to Protocol 1 of the Geneva Conventions have an obligation to ascertain that new weapons do not violate the laws and customs of war. These include whether the effects of DU weapons can be limited only to legitimate targets, whether their use is proportionate.
- Belgium (2009) and Costa Rica (2011) have legislated bans on DU weapons
- In 2007, 136 states including NZ supported a UN General Assembly resolution accepting that the use of DU munitions was a potential threat to health. Only 6 states voted against including the US and UK.
- In 2008, 98% of MEPs in the European Parliament called for a DU Ban Treaty.
- Later that year at the UN 141 states, again including NZ, supported a resolution asking for more studies into the effects of DU weapons
- A new resolution was introduced at the 2010 UN General Assembly Disarmament Session. It invited states to provide quantitative and geographic data on DU use to facilitate research and decontamination.. Only 4 states voted against: US, UK, Israel and France.

### **Would the Bill affect non-military uses of DU in New Zealand?**

- Depleted uranium has some non-military uses, for instance, radiation shielding in medical radiation therapy, but this would not be affected by this Bill. Also, aircraft can contain counter weights of 400-1500kg of depleted uranium, but reports say DU is being phased out in commercial aircraft and replaced with tungsten on safety grounds.