

Committee: Environment

Question of: The removal of depleted uranium ammunition in former war zones

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I) Introduction

“The effect of depleted uranium, used by America in the Gulf War, is never referred to.” – Harold Pinter

As all of you may know, the atomic bomb is the most destructive and horrific weapon that mankind has ever created. But a lesser known fact is that the A bomb is not the only use of radioactive elements in combat. Depleted uranium is the metal of choice for armor-piercing bullets, and although it is not the only metal used for anti-tank bullets (tungsten being the other one), it is more efficient and cheaper, but also more environmentally damaging than its alternative. Depleted uranium is also used to reinforce military vehicles such as tanks.

Uranium is "pyrophoric": at the point of impact it burns away into vapors of uranium oxide. When it breaks through, the burning DU turns the inside of a vehicle into an inferno of white-hot gas and sparks. This way, the radioactive metal is spread into the environment and can be inhaled by the soldiers or contaminate the ground below.

II) Definition of key terms

Depleted uranium

Depleted uranium is uranium with a lower content of U-235 fissile isotope and the main by-product of uranium enrichment. After the more radioactive isotopes have been extracted for uses such as nuclear fuel or nuclear weapons, depleted uranium remains as a less radioactive metal, but equally as toxic as normal uranium.

III) Background information

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The widest scale use of depleted uranium bullets was in the Gulf Wars. Tons of ammunition which the population had contact with were dropped onto cities. After the war, the number of cancer cases and congenital abnormalities had risen and children of those people are still being born with horrific abnormalities.

In the USA the death toll caused by depleted uranium contamination during Gulf War I (known as Gulf War Syndrome) is over 11.000. Today, 56% of American soldiers that served in that war are on permanent medical disability. The effects of depleted uranium were not known at that time and studies didn't show much, but years later they are revealed right in front of us. Even worse, the Gulf Wars were not the only cases of depleted uranium usage, as the Bosnian, Kosovo and more recently Syrian conflicts are all instances of depleted uranium ammunition usage. The affected regions need to be evaluated and decontaminated as the uranium could enter the soil and ground water and from there straight into the food and our bodies.

At least 18 countries are thought to have weapon systems with DU in their arsenals. These include: UK, US, France, Russia, Greece, Turkey, Israel, Saudi Arabia, Bahrain, Egypt, Kuwait, Pakistan, Thailand, China, India and Taiwan Province of China. Many of them were sold DU ammunition by the US while others, including France, Russia and India are thought to have developed it independently.

V) Major countries and organizations involved

United States of America

Although there are at least 18 countries which are believed to possess depleted uranium weapons or reserves, the USA is the largest producer and 1 of 2 official users of such ammunition.

United Kingdom

The UK has expressed its policy of acceptance of such weapons in the past. It is the second country to officially recognize the usage of depleted uranium weapons.

Iraq

Being on the loser side of both Gulf Wars, Iraq is the country whose population is most affected by Depleted Uranium weapons. Children with horrible malformations are still being born today in the country. The situation is being worsened by scrap metal collectors who spread the contaminated material.

V) Relevant UN treaties and events

The UN hasn't adopted any resolution or treaty regarding the matter yet.

VI) Previous attempts to solve the issue

Although there has yet to be any official document regarding this issue, the International Coalition to Ban Uranium Weapons (ICBUW) is an NGO that continues to fight against depleted uranium weapons.

VII) Possible solutions

Bans on uranium weapons

Though the topic focuses on decontamination of former war zones, a resolution that bans the use of uranium weapons is needed to prevent future contaminations. Since any country that has a nuclear power plant can collect depleted uranium from its waste, which makes it very cheap, it would take very serious negotiations to ban these kind of weapons.

Cleaning up the sites

Once you have removed the larger fragments by hand, there are three main methods: mechanical, chemical and biological. Mechanical removal involves digging up the contaminated soil and land filling it. Chemical methods include leaching out the uranium using liquid and a substance that binds to the uranium, while biological methods utilize certain bacteria and plants.

The biological option is currently the focus of much research. It has been found that certain plants called hyper-accumulators naturally absorb and store large quantities of certain heavy metals. Once grown on a site the plants can be picked and securely land filled or burnt and the ash collected.

Alternatively, it is possible to encourage the growth of certain bacteria that convert mobile uranium into an immobile form, which then gets trapped in soils; this prevents it entering groundwater supplies.

VIII) Questions delegates should consider during research

- As there is a danger for the population, who will clean up?
- Who covers the expenses?
- Can the ones suggesting or ordering the use of these weapons be put on trial?

XI) Useful links and sources

<https://www.un.org/disarmament/convarms/more-on-depleted-uranium/>

https://www.who.int/ionizing_radiation/pub_meet/en/DU_Eng.pdf?ua=1

<http://www.werner-photography.com/albums/depleted-uranium-the-silent-genocide/>

http://www.ansa.it/english/news/2018/02/07/depleted-uranium-caused-italy-soldiers-cancer-probe-4_0ceba3e0-f0da-484c-aba5-30522d0210d9.html

<https://www.globalresearch.ca/depleted-uranium-death-toll-among-us-war-veterans-tops-11-000/3620>

<https://www.theguardian.com/world/2000/may/18/armstrade.kosovo>

<http://www.bandepleteduranium.org/en/faq#11>