

Country: North Korea

Committee: United Nations General Assembly First Committee (UNGA - DISEC)

Agenda: Addressing Nuclear Waste / Fallout

Nuclear fallout is the residual radioactive material propelled into the upper atmosphere following a nuclear blast, so-called because it "falls out" of the sky after the explosion and the shock wave has passed. It commonly refers to the radioactive dust and ash created when a nuclear weapon explodes. Evidence suggests that North Korea stores its high-level nuclear waste (HLW) in liquid form in tanks on the same site where it is made and has not invested in infrastructure to reduce, denitrify, or vitrify this waste. A major environmental concern related to nuclear power is the creation of radioactive wastes such as uranium mill tailings, spent (used) reactor fuel, and other radioactive wastes. There have been several proposals for regional and international repositories for the disposal of high-level nuclear waste, and in 2003 the concept received strong endorsement from the head of the International Atomic Energy Agency. These materials can remain radioactive and dangerous to human health for thousands of years and by 2017, North Korea was assessed to have produced between 30 and 60 nuclear warheads' or weapons' worth of fissile material with the capacity to create seven to 12 additional warheads per year. Nuclear power is characterized by the very large amount of energy produced from a very small amount of fuel, and the amount of waste produced during this process is also relatively small. However, much of the waste produced is radioactive and therefore must be carefully managed as a hazardous material. All parts of the nuclear fuel cycle produce some radioactive waste and the cost of managing and disposing of this is part of the electricity cost.

North Korea showed an interest in developing nuclear weapons since the 1950s. The nuclear program can be traced back to about 1962 when North Korea committed itself to what it called an "all-fortress nation", which was the beginning of the hyper-militarized North Korea of today. In 1963, North Korea asked the Soviet Union for help in developing nuclear weapons but was refused. The Soviet Union agreed to help North Korea for generating a peaceful nuclear energy program, including the training of nuclear scientists. Later, China, after its nuclear tests, similarly rejected North Korean requests for help with developing nuclear weapons. North Korea's nuclear weapons program dates back to the 1980s. Focusing on practical uses of nuclear energy and the completion of a nuclear weapon development system, North Korea began to operate facilities for uranium fabrication and conversion and conducted high-explosive detonation tests. On October 9, 2006, North Korea announced it had successfully conducted its first nuclear test. On January 6, 2007, the North Korean government further confirmed that it had nuclear weapons. The agreement was reached following a series of six-party talks, involving North Korea, South Korea, China, Russia, Japan, and the United States began in 2003. According to the agreement, a list of its nuclear programs would be submitted and the nuclear facility would be disabled in exchange for fuel aid and normalization talks with the United States and Japan.

The United Nations has sought to eliminate such weapons ever since its establishment. The first resolution adopted by the UN General Assembly in 1946 established a Commission to deal with problems related to the discovery of atomic energy among others. According to The Republic Of Korea, amidst the most urgent and grave threat to date concerning nuclear weapons, the Republic of Korea remains unwaveringly committed to our common goal of a world without

these weapons. Half a century ago, the creation of the NPT was the outcome of collective efforts by the international community, which acted on a keen sense of urgency to avert devastation by nuclear war. After five decades, the NPT is the most realistic, effective, and inclusive tool to make our world free from nuclear weapons. Despite the achievements, North Korea is still struggling, I repeat, with an ever-growing threat that undermines the very global non-proliferation regime we have worked so hard to build over the years. This report (DPRK nuclear waste) aims also to investigate the consequences of the latest nuclear weapons tests conducted by North Korea, highlighting the impact of radioactive pollution on the atmospheric, aquatic, and underground environments. Special attention was given to the concentration of main radioactive isotopes which were released, such as ^{241}Am , ^{14}C , ^{137}Cs , ^{131}I , ^{210}Po , ^{238}Pu , ^{239}Pu , ^{240}Pu , and ^{90}Sr , generally stored in the atmosphere and marine environment. The quantity of nuclear waste emitted after each nuclear test is difficult to be estimated.