Written by John Hallam Saturday, 29 August 2015 16:30 - Last Updated Saturday, 29 August 2015 16:31

INTERNATIONAL DAY AGAINST NUCLEAR TESTS 29 AUG

PEOPLE FOR NUCLEAR DISARMAMENT (PND) NSW

COMPREHENSIVE TEST BAN TREATY SHOULD ENTER INTO FORCE

Today (29 August) is the International Day Against Nuclear Tests. The date of 29 Aug was chosen by the United Nations at the suggestion of the Government of Kazakhstan, as it was the day on which the former Soviet nuclear test site at Semipalatinsk was closed.

Over 1100 nuclear tests were carried out by the United States in Nevada, Alaska, the Marshall Islands, other parts of the Pacific, and in outer space.

Tests carried out in Nevada resulted in large-scale contamination of downwind inhabitants and large-scale morbidity.

The Largest ever US test was the 15Megaton Castle Bravo test, which contaminated the crew of the Japanese fishing boat Lucky Dragon, bringing about an agonizing slow death from radiation sickness, and contaminating the Marshall Islands.

The largest nuclear test ever was carried out by the Soviets in the early '60s in Novaya Zemlya, a large island above the arctic circle, and known as 'Tsar Bomba' (King of Bombs). At 60megatons, it vaporized the sacred hunting grounds of the Nenets people, sent fallout right around the world and caused the planet to ring like a bell with seismic shock for hours. The Soviets carried out around 800 nuclear tests, many of them at the Semipalatinsk test site, and causing widespread radioactive contamination with catastrophic effects on local populations.

In addition, nuclear tests have been carried out by the UK, (many of them in Maralinga and Emu Field, Australia), France (Algeria and the Pacific), China (Sinkiang), India (Pokhran, Rajasthan) Pakistan (Baluchistan), and the DPRK. French, Chinese, and British tests have all inflicted radiation-based disease and death on local populations and participants.

Nuclear testing is the backbone of nuclear arms-racing and proliferation. A resumption of nuclear testing, or the conducting of a new nuclear test by any country – including the DPRK – helps to inch the world toward an abyss into which we hope it will never go.

The best way to halt proliferation and nail down a 'no nuclear testing' norm is for the Comprehensive Test Ban Treaty, which outlaws nuclear testing, to come into force.

The main obstacles currently to the entry into force of the CTBT is the refusal of the US Senate to ratify the treaty. If the US were to ratify the CTBT, a small but highly strategic cascade of other ratifications (China, and one or two others) would take place, and the CTBT would enter into force.

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Other means might also be sought to cause the CTBT to enter into force.

Banning nuclear testing is both an important environmental protection and an important step toward the elimination of nuclear weapons altogether.

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UN urges all States to sign, ratify Nuclear Test Ban as 'critical step on road to nuclear-free world'

http://www.un.org/apps/news/story.asp?NewsID=51744#.VeE7q30pq2A

A view of Semipalatinsk Test Site's ground zero in Kurchatov, Kazakhstan. Remote Semipalatinsk was once the Soviet Union's primary testing venue for nuclear weapons. UN Photo/Eskinder Debebe

28 August 2015 – For the fifth International Day against Nuclear Tests, United Nations Secretary-General Ban Ki-moon has welcomed voluntary moratoria on testing imposed by nuclear-armed states but stressed that these cannot substitute for a legally-binding treaty.

"The Comprehensive Nuclear-Test-Ban Treaty (CTBT) is essential for the elimination of nuclear weapons," Mr. Ban said in a message. "It is a legally-binding, verifiable means by which to constrain the quantitative and qualitative development of nuclear weapons."

The UN General Assembly declared 29 August the International Day against Nuclear Tests in December 2009, adopting a unanimous resolution that calls for increasing awareness and education "about the effects of nuclear weapon test explosions or any other nuclear explosions and the need for their cessation as one of the means of achieving the goal of a nuclear-weapon-free world." 2010 marked the inaugural commemoration of the International Day against Nuclear Tests.

Reminding the world that this year marks the 70th anniversary of the dawn of the nuclear age, the UN chief said 70 years ago in 1945, "the Trinity Test unleashed the power of more than 20,000 tons of TNT and precipitated over 2,000 additional nuclear tests."

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"Pristine environments and populated communities in Central Asia, North Africa, North America and the South Pacific were hit," he said. "Many have never recovered from the resulting environmental, health and economic damage. Poisoned groundwater, cancer, leukaemia, radioactive fallout – these are among the poisonous legacies of nuclear testing."

"The best way to honour the victims of past tests is to prevent any in the future," he said, noting that two decades after the CTBT was negotiated, "the time has long past for its entry-into-force."

"I welcome the voluntary moratoria on testing imposed by nuclear-armed States," Mr. Ban said "At the same time, I stress that these cannot substitute for a legally-binding Treaty."

"On this International Day, I repeat my longstanding call on all remaining States to sign and ratify the Treaty – especially the eight necessary for its entry-into-force – as a critical step on the road to a nuclear-weapon-free world," he said.

The General Assembly resolution that established the world day was initiated by Kazakhstan, together with a large number of sponsors and cosponsors with a view to commemorate the closure of the Semipalatinsk Nuclear Test site on 29 August 1991.

In his remarks, Assembly President Sam Kutesa said the recently held 2015 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) had highlighted the stark reality of the increasing divisions between the States parties over the future of nuclear disarmament.

"It is now time to bridge the gap and work with more resolute political will to ensure that the NPT continues to remain the cornerstone of global security," he declared.

Mr. Kutesa applauded the efforts of the Government of Kazakhstan, not only for initiating the International Day, but also for its continuing leadership in efforts to end nuclear weapons testing and to promote a world free of nuclear weapons.

He also commend the recent announcement of the Joint Comprehensive Plan of Action (JCPOA) on Iran's nuclear programme, reached in Vienna between the international negotiators and Iran as an important step forward on this critical issue.

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"I hope this agreement will benefit the non-proliferation regime and will lead to greater mutual understanding and cooperation on the many serious security challenges in the Middle East and beyond," he said.

He also announced that on 10 September, he plans to convene an informal meeting of the General Assembly to mark the International Day under the overall theme 'Towards Zero: Resolving the Contradictions.'

http://www.dailytimes.com.pk/national/28-Aug-2015/un-urges-all-states-to-sign-ratify-ctbt

UN urges all states to sign, ratify CTBT

Ban says comprehensive treaty essential for elimination of nuclear weapons

APP

August 28, 2015, 11:45 pm Be First To Comment

NEW YORK – UN Secretary General Ban Ki-moon has welcomed voluntary moratoria on testing imposed by nuclear-armed states but stressed that these cannot substitute for a legally-binding treaty.

"A Comprehensive Nuclear-Test Ban Treaty (CTBT) is essential for the elimination of nuclear weapons," the secretary-general said in a message marking the fifth International Day against Nuclear Tests. "It is a legally-binding, verifiable means by which to constrain the quantitative and qualitative development of nuclear weapons," he said.

The UN General Assembly declared August 29 the International Day against nuclear tests in December 2009, adopting a unanimous resolution that calls for increasing awareness and education about the effects of nuclear weapon test explosions or any other nuclear explosions and the need for their cessation as one of the means of achieving the goal of a nuclear-weapon-free world. 2010 marked the inaugural commemoration of the International Day against Nuclear Tests.

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Nuclear weapon-free world –

"Many have never recovered from the resulting environmental, health and economic damage. Poisoned groundwater, cancer, leukaemia, radioactive fallout – these are among the poisonous legacies of nuclear testing," he said. "The best way to honour the victims of past tests is to prevent any in the future," he said, noting that two decades after the CTBT was negotiated, "the time has long past for its entry-into-force."

"I welcome the voluntary moratoria on testing imposed by nuclear-armed states," Ban said. "At the same time, I stress that these cannot substitute for a legally-binding treaty," he said. "On this international day, I repeat my longstanding call on all remaining states to sign and ratify the treaty especially the eight necessary for its entry-into-force as a critical step on the road to a nuclear weapon-free world," he said.

- Pakistan, India and Israel -

Pakistan, India and Israel have declined to sign the NPT on grounds that such a treaty is fundamentally discriminatory as it places limitations on states that do not have nuclear weapons while making no efforts to curb weapons development by declared nuclear states. The General Assembly resolution that established the world day was initiated by Kazakhstan, together with a large number of sponsors and cosponsors with a view to commemorate the closure of the Semipalatinsk Nuclear Test site on August 29, 1991.

http://www.pakistantoday.com.pk/2015/08/29/comment/what-happened-with-the-ctbt/

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What happened with the CTBT?

7 hours ago BY Maimuna Ashraf

A grim reminder on International Day against Nuclear Tests

"Now we are all sons of b******, an immediate response of Dr Kenneth T Bainbridge, the physicist who directed the first atomic bomb test, on the first ever detonation of nuclear weapon. "Trinity" was the codename given to the world's first nuclear explosion by Dr J Robert Oppenheimer, known as the 'father of atomic bomb' for leading the World War II Manhattan Project that produced the first atomic bomb. His reaction to Trinity Test, in which he recalled line from Bhagavad-Gita is also remarkable; "Now I am become death, the destroyers of worlds." 'The foul and awesome display' of this plutonium implosion device was seen on July 16, 1945, at a site known as "Jornade del Muerto" located in the New Mexico desert at Alamogordo, some miles south of Los Alamos. The world lately observed the 70th anniversary of the dawn of nuclear age.

Since this first nuclear explosion till now, 2,053 nuclear test explosions have been recorded at dozens of test sites around the world by eight states: P5, India, Pakistan and North Korea. US detonated 1,030 atomic bomb. Russia, the second nuclear power, tested 715 nuclear tests. UK carried out 45 nuclear weapon tests, France 210, China 43. India tested its first nuclear device in 1974, while reportedly 6 other nuclear tests were conducted in 1998. Responding to India's nuclear weapon explosions, Pakistan detonated 6 nuclear devices at Chagai. North Korea exploded 3 nuclear weapons in 2006, 2009 and 2013 respectively. To ensure the protection of people's lives and environment, most of the atomic tests are conducted underwater or underground, however almost 528 tests in early years were detonated in the atmosphere, resulting in spread of radioactive material. Often the underground nuclear explosions also vent radiations into the atmosphere and leave radioactive contamination in soil.

To advocate the banning of nuclear tests and to educate the world about the legacy impacts of nuclear detonation, UN unanimously approved a draft resolution on December 02, 2009, to declare 29 August the "International Day against Nuclear Tests". The resolution was initiated by the Republic of Kazakhstan with a view to commemorate the closure of the Semipalatinsk Nuclear test facility on August 29, 1991, which was the world's largest underground nuclear test site containing 181 separate tunnels and almost 460 nuclear explosions were conducted there, few reportedly resulted in dispersion of plutonium in the environment. The facility was closed by Kazakhstan government after

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dissolution of USSR in 1991. After the establishment of International Day against Nuclear Test, all states parties to NPT committed themselves to "achieve peace and security of world without nuclear weapons" in May 2010. The inaugural commemoration of the International Day against Nuclear Tests was marked on August 29, 2010.

Therein lies the question as to why states detonate nuclear weapons if they jeopardise human health and environment. And is it enough to celebrate an international day against nuclear tests or what other international mechanism has been placed in this deference? Pragmatically, states conduct nuclear tests to evaluate new warhead designs and to create more sophisticated weapons. An international instrument to ban all civilian or military purposed nuclear tests in all environments is not novel agenda of nuclear arms control. In August 1963, Partial Test Ban Treaty (PTBT), signed by US, UK and USSR, entered into force and banned the nuclear testing of signatory states in the atmosphere, outer space, underwater but not underground. Though underground, not only the nuclear weapons testing continued but the quantity also increased.

Later, PTBT became redundant with the signing of Comprehensive Test Ban Treaty (CTBT) in September 1996, which bans all nuclear explosions in all environments. Before CTBT, all treaties entered into force limit but not ban the nuclear tests. Nonetheless, CTBT will enter into force only after the 44 states listed in the treaty ratify it. Of which 41 signed the treaty, 36 ratified, while DPRK, India and Pakistan have neither signed nor ratified. Interestingly, five nuclear-capable states Egypt, Iran, Israel, including two NPT signatory states China and US, have signed but not ratified CTBT. Eight conferences on facilitating entry into force of CTBT have been held and ninth will take place this year on September 29, 2015. Since 1996, India, Pakistan and DPRK have tested their nuclear weapons while many states including US and Russia claim they have not tested nuclear weapons since this timeframe.

Although, in 2009 President Obama outlined his vision of a world free of nuclear weapons but later he forged new treaties to reduce the number of and spread of nuclear arsenals. On the contrary, he promised in his 2010 Nuclear Posture Review to uphold the triad of nuclear arsenals supported by every former US president. At the end of 2010, US ratified New START agreement with Russia to limit both sides' arsenals to 1,550 but again no advancement ensued on a treaty which puts a permanent ban on nuclear tests.

Notwithstanding that US and Russia did not explode nuclear weapons after signing CTBT, since 1997-2014, US has held twenty-eight

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'subcritical, sub-zero tests in the form of computer simulations' at the Nevada National security site. Conversely, Russia has also been conducting subcritical experiments involving both uranium and weapons-grade plutonium at Novaya Zemlya test site near Arctic Circle. It means that in the absence of an option for underground testing which previously provided assurance about the reliability of deployed nukes, the designers of nuclear weapons now depend on computer simulations along with laboratory level nuclear tests to ensure and enhance the safety and reliability of nuclear weapons.

Los Alamos National Laboratory was the first to conduct the subcritical experiment in 1997. The website of US Department of State on computer simulation says, "Today, weapons designers benefit from better simulation tools and computers capable of running highly detailed calculations. Successes to date indicate that a cadre of world-class scientists and engineers can employ physics-based simulations, modern experiments, validations against collections of re-analysed data from previous underground nuclear explosive tests, and peer reviews to support stockpile decisions well into the future without the need to return to nuclear explosive testing. These computer simulation advances provide the United States with the ability to monitor and maintain the nuclear weapons stockpile without nuclear explosive testing."

Evidently, keeping an option by not ratifying CTBT and conducting subcritical tests shows that the US aims to improve its arsenals qualitatively and want to maintain its option or ability to conduct onerous underground nuclear testing if it becomes indispensable. Inevitably, Russia would also change its attitude towards CTBT although it has ratified CTBT in 2000 if the safety or readiness of their nuclear would no more comply with the treaty. CTBT is a zero-yield ban but US and UK held "hydronuclear" tests with yields up to four pounds, whereas Russia, France, and China chose yield limits of 10 tons, 300 tons, or an exemption for peaceful nuclear detonation, respectively. Such yield limits are unacceptable to many NNWS while a preference for peaceful nuclear explosion exemption has been rejected by almost every NNWS.

Thus the contour of subject is that there is still a possibility to modernise the nuclear warheads components, verify the reliability of aging nuclear stockpiles and stimulate the environmental effects even if all 44 states ratify CTBT because it does not stop from hydronuclear, subcritical test through computer simulation and allows NWS to qualitatively improve their arsenals at sub-zero. A grim reminder on International Day against Nuclear Test is that a discriminatory CTBT would not fulfill the nuclear-test-ban ethos till

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it removes any escape routes including explosives or non-explosive tests.