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INTERNATIONAL HUMAN RIGHTS CLINIC
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Time to Act against Incendiary Weapons

Memorandum to Delegates at the Fifth Review Conference of the Convention on Conventional Weapons

December 2016



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Introduction

In mid-December 2016, countries party to a major disarmament treaty have an opportunity to take concrete steps toward reducing and ending the human suffering caused by incendiary weapons. They will convene at the United Nations in Geneva for the Fifth Review Conference of the 1980 Convention on Conventional Weapons (CCW). Protocol III of the CCW governs the use of these exceptionally cruel weapons. At the Review Conference, states should condemn the use of incendiary weapons and commit to initiating substantive discussions in 2017 to review the adequacy of existing legal protections and consider how to strengthen them.

Incendiary weapons produce heat and fire, inflicting excruciatingly painful burns on civilians and soldiers alike. Those who survive endure injuries that are difficult to treat and can lead to severe permanent disfigurement and long-term psychological harm. Fires started by incendiary weapons can be difficult to extinguish and can destroy civilian objects and infrastructure.

There is clear evidence of ongoing use of incendiary weapons in Syria. Attacks using these weapons in Syria have escalated since Russia began its joint operation with government forces at the end of September 2015. For at least a few weeks in mid-2016, incendiary weapons were used almost every day in attacks on opposition-held areas. In addition, US forces have used white phosphorus munitions in Iraq, and the Saudi Arabia-led coalition has used them in Yemen.

Meanwhile, international calls to respond to the problem have continued to increase. Most states that have spoken out on the issue have condemned use of incendiary weapons because of the harm they cause. Many states have recommended revisiting and strengthening Protocol III.

Protocol III regulates the use of incendiary weapons, but it does not go far enough. It applies only to weapons that are “primarily designed” to set fires or cause burns, and thus some states believe it excludes certain multipurpose munitions with incendiary effects, notably those with white phosphorus. In addition, the protocol contains weaker restrictions for ground-launched incendiary weapons than air-dropped versions, even though all such weapons produce horrific injuries. Although a ban on incendiary weapons would have the greatest impact from a humanitarian perspective, small

changes to the text of Protocol III could significantly enhance its protections and strengthen the norm against incendiary weapons.

Human Rights Watch and the Harvard Law School International Human Rights Clinic (IHRC) call on states parties to seize the moment and use the CCW's Review Conference to advance efforts to address the humanitarian consequences of incendiary weapons. In particular, Human Rights Watch and IHRC urge states parties at the CCW Fifth Review Conference to:

- Agree to a new mandate that sets aside time in 2017 to discuss the implementation and adequacy of Protocol III and consider ways to strengthen it;
- Adopt a Final Declaration that reflects the widespread condemnation of incendiary weapons and the calls to revisit and amend Protocol III;
- At a minimum, recognize in the Declaration the calls to discuss whether Protocol III adequately protects civilians and combatants from the severe consequences of weapons with incendiary effects, as Switzerland has proposed;
- Commit to work to strengthen Protocol III, including by:
 - Adopting an effects-based definition of incendiary weapons, and
 - Prohibiting, at a minimum, the use of all incendiary weapons in civilian areas, while recognizing that an absolute ban would have the greatest humanitarian benefits.

All states, whether or not they are CCW states parties, should:

- Condemn the use of incendiary weapons;
- Provide information about national policies and practices related to incendiary weapons; and
- Join and comply with CCW Protocol III, if they have not already done so.

I. Harm Caused by Incendiary Weapons

Incendiary weapons are munitions that produce heat and fire through the chemical reaction of a flammable substance. They contain chemical compounds such as napalm or napalm-like substances, white phosphorus, thermite, or chlorine trifluoride. Incendiary weapons can be designed for marking and signaling or to burn materiel, penetrate plate metal, or produce smokescreens. Incendiary weapons inflict cruel and lasting injuries on people and destroy civilian property.¹

Thermal Burns and Respiratory Damage

Victims of incendiary weapon attacks can experience serious bodily harm, including thermal burns and respiratory damage.² Through the action of their chemical agents and through secondary fires, incendiary weapons can cause fourth- or even fifth-degree thermal burns. Such burns can go beyond destroying the skin; they can damage muscles, ligaments, tendons, nerves, blood vessels, and even bones. The recovery process is slow and painful. The daily cleansing of burns “inflicts pain that defies description.”³ Dressings must be changed, skin grafts that do not take must be softened and sloughed off, dead and infected skin and tissue must be chipped away. One doctor compared this process to being “flayed alive.”⁴ Many victims die. Those who survive are left physically and psychologically scarred.⁵

The heat and smoke of incendiary weapons can seriously affect the respiratory system. Inhaling hot gas and combustion products can result in respiratory burns and other pulmonary complications, including pneumonia.⁶ Because incendiary weapons often produce carbon monoxide or other noxious gases, victims can also die from poisoning.

¹ Other types of harm caused by incendiary weapons include asphyxiation and shock. For more information on incendiary weapons and the harm they cause, see Human Rights Watch and Harvard Law School International Human Rights Clinic (IHRC), *The Human Suffering Caused by Incendiary Munitions: Memorandum to Convention on Conventional Weapons Delegates*, March 2011, <http://hrp.law.harvard.edu/wp-content/uploads/2011/04/sufferingweapons.pdf>.

² UN Department of Political and Security Council Affairs, “Napalm and Other Incendiary Weapons and All Aspects of Their Possible Use: Report of the Secretary-General,” A/8803/Rev. 1, 1973, p. 31.

³ Denise Chong, *The Girl in the Picture* (New York: Penguin Group, 1999), pp. 94-95.

⁴ *Ibid.*, p. 94.

⁵ UN Department of Political and Security Council Affairs, “Napalm and Other Incendiary Weapons and All Aspects of Their Possible Use,” p. 30.

⁶ Stockholm International Peace Research Institute, *Incendiary Weapons* (Cambridge, MA: The MIT Press, 1975), pp. 142-143.

Long-Term Effects and Permanent Damage

The harm caused by incendiary weapons can be long lasting and far reaching. Victims who survive initial injuries face an aftermath that can involve intense pain, serious infections, organ failure, severe disfigurement, and lifelong disability. Furthermore, victims can lose motor function, especially in the hands, due to scarring and skin damage,⁷ and can suffer from contractures, the restriction of underlying muscles and joints from superimposed scars or inadequate skin grafts.⁸ Treatment of the victims' pain can lead to drug dependency and later to withdrawal symptoms.

Victims endure suffering that goes beyond physical injury. They are forced to “confront ... the sight of one’s own naked and burned body ... and the stench of one’s own rotting flesh.”⁹ They are often physically and psychologically isolated from society during their treatment. After healing, they are sometimes socially shunned because of their scarring and disfigurement, causing them to further withdraw from society. Victims are thus vulnerable to psychological trauma and face difficulties in reintegrating into society.

White Phosphorus

Although some states assert that the definition of incendiary weapons in CCW Protocol III excludes munitions with white phosphorus, the effects of white phosphorus are comparable to those of other incendiary substances.¹⁰

White phosphorus ignites when exposed to atmospheric oxygen and continues to burn until it is deprived of oxygen or exhausted. Its chemical reaction can create intense heat (about 815° C/1500° F), light, and smoke.¹¹ White phosphorus can thus be used for marking, signaling, and tracing, as well as to destroy fuel supplies and ammunition caches and to conceal troop movements. White phosphorus has also been used as a weapon.

⁷ UN Department of Political and Security Council Affairs, “Napalm and Other Incendiary Weapons and All Aspects of Their Possible Use,” p. 35. Hands suffer particular damage from napalm because victims try to wipe the sticky substance off their body.

⁸ Stockholm International Peace Research Institute, *Incendiary Weapons*, p. 146.

⁹ *Ibid.*, p. 149.

¹⁰ The definition of incendiary weapons in Protocol III is discussed in more depth below.

¹¹ Phosphorus oxides react with moisture in the air to produce a smoke cloud of phosphorus-containing acids. The smoke is impenetrable to infrared optics, making it especially effective for protecting tanks from guided missiles.

No matter how it is used, white phosphorus poses a high risk of horrific and long-lasting injury. It can burn people, thermally and chemically, down to the bone.¹² It is highly soluble in fat, and therefore in human flesh. White phosphorus fragments can exacerbate wounds even after treatment and can enter the bloodstream and cause multiple organ failure. Already dressed wounds can reignite when dressings are removed and they are re-exposed to oxygen. Even relatively minor burns are often fatal.¹³

¹² David J. Barillo, Leopoldo C. Cancio, and Cleon W. Goodwin, "Treatment of White Phosphorous and Other Chemical Burn Injuries at One Burn Center over a 51-Year Period," *Burns*, vol. 30 (2004), p. 450. See also Lisandro Irizarry et al., "White Phosphorus Exposure," <http://emedicine.medscape.com/article/833585-overview> (accessed December 6, 2016).

¹³ "Identification of Explosive White Phosphorus Injury and Its Treatment," signed by Dr. Gil Hirshorn, colonel, head of the Trauma Unit, Headquarters of the Chief Military Medical Officer, Ref. Cast Lead SH9 01293409 (original Hebrew on file at Human Rights Watch); "Exposure to White Phosphorus," signed by Dr. Leon Fulls, Ministry of Health War Room, January 15, 2009, Ref. Cast Lead SH9 01393109 (original Hebrew on file at Human Rights Watch); Global Security, "White Phosphorus," <http://www.globalsecurity.org/military/systems/munitions/wp.htm> (accessed December 6, 2016).

II. Recent Use of Incendiary Weapons

The exceptionally cruel harm caused by incendiary weapons makes their continued use 36 years after the adoption of Protocol III a matter of great concern. Between 1980 and 2016, incendiary weapons were used or reportedly used in at least 17 different conflicts on three continents.¹⁴ From 2000 to 2016, white phosphorus munitions, in particular, were reportedly used in at least 7 different conflicts.¹⁵

In the past year, there has been heavy use of incendiary weapon in Syria, particularly in the middle of 2016. New use of white phosphorus munitions was documented in Iraq and Yemen. These incidents illustrate that incendiary weapons pose an ongoing threat to civilians.

Syria

Human Rights Watch has documented scores of attacks with air-dropped incendiary weapons since the conflict in Syria began. Human Rights Watch recorded about 60 incendiary weapons attacks by Syrian government forces between November 2012 and mid-2015, and compiled evidence of new attacks in 2016.¹⁶ Incendiary weapons were used north of the city of Aleppo nearly every day for a few weeks in June 2016.¹⁷ Human Rights Watch documented that, between June 5 and August 10 alone, incendiary weapons were used at least 18 times in the opposition-held areas of Aleppo and Idlib. At least 12 civilians were reported wounded in five of these incendiary weapon

¹⁴ The places in which incendiary weapons have been used include: Afghanistan in 1980s and 2000s, El Salvador in early 1980s, Argentina in 1982, Chad in 1983, Turkey in 1990s, Bosnia in 1994, Iraq in 1991 and 2003, Lebanon in 2006, Somalia in 2007, Gaza in 2008 and 2009, Libya in 2015, Ukraine from 2014 to 2015, Yemen in 2016, and Syria from 2012 to the present. See Human Rights Watch and IHRC, *The Human Suffering Caused by Incendiary Munitions*; Human Rights Watch and IHRC, *Incendiary Weapons: Recent Use and Growing Opposition*, November 2014, <https://www.hrw.org/news/2014/11/10/incendiary-weapons-recent-use-and-growing-opposition>.

¹⁵ Afghanistan, Gaza, Iraq, Lebanon, Somalia, Ukraine, and Yemen. See Human Rights Watch and IHRC, *The Human Suffering Caused by Incendiary Munitions*; Human Rights Watch and IHRC, *From Condemnation to Concrete Action: A Five-Year Review of Incendiary Weapons*, November 2015, https://www.hrw.org/sites/default/files/supporting_resources/incendiaries-5_year_review-final_o.pdf, pp. 13-14.

¹⁶ For more information on the attacks in Syria, see Human Rights Watch, *Syria's Use of Incendiary Weapons*, November 2013, <https://www.hrw.org/news/2013/11/11/syrias-use-incendiary-weapons>; Human Rights Watch and IHRC, *Incendiary Weapons: Recent Use and Growing Opposition*; Human Rights Watch and IHRC, *From Condemnation to Concrete Action: A Five-Year Review of Incendiary Weapons*; "Syria/Russia: Incendiary Weapons Burn in Aleppo, Idlib," Human Rights Watch news release, August 16, 2016, <https://www.hrw.org/news/2016/08/16/syria/russia-incendiary-weapons-burn-aleppo-idlib>.

¹⁷ Ole Solvang (Human Rights Watch), "Russian Cluster Munitions Have Literally Made Syria a Minefield," commentary, *The Moscow Times*, June 29, 2016, <https://themoscowtimes.com/articles/russian-cluster-munitions-have-literally-made-syria-a-minefield-53518> (accessed December 6, 2016).

attacks.¹⁸ Human Rights Watch also interviewed witnesses of an incendiary weapon attack on a field hospital in Daraya on August 19.¹⁹ Human Rights Watch recorded additional use of incendiary weapons in the Aleppo neighborhoods of al-Kallaseh, Bustan al-Qasr, al-Asileh, al-Mashhad, and al-Sha'ar between September 22 and September 30.²⁰

In reality the number of incendiary weapon attacks in Syria is likely far higher. Between June 2 and December 8, 2016, Syria Civil Defense (a volunteer search-and-rescue organization operating in opposition-held areas of Syria) and local media activists reported that incendiary weapons had been used 130 times.²¹ For 51 of these attacks, the reports were accompanied by photographs or video footage that showed remnants of incendiary weapons, or small, intense fires, a signature of incendiary weapon attacks.²² Other attacks may have gone unreported altogether.

The increase in the use of incendiary weapons in Syria has coincided with Russia's joint military operation with the Syrian government, which began in September 2015. There is compelling evidence that Russian government aircraft are being used to deliver incendiary weapons or at least are participating with Syrian government aircraft in attacks using incendiary weapons. Footage from Syria broadcast on Russia Today on June 18, 2016, showed incendiary weapons—specifically RBK-500 ZAB-2.5S/M bombs—being mounted on a Russian SU-34 fighter-ground attack aircraft at the Russian airbase in Hmeymim, southeast of Latakia city.²³ Only the Russian air force operates this type of aircraft in Syria. Despite evidence to the contrary, at a meeting of CCW states parties in August 2016, Russia denied that it had used incendiary weapons in its joint operation with Syrian government forces on opposition-held areas.²⁴

¹⁸ "Syria/Russia: Incendiary Weapons Burn in Aleppo, Idlib," Human Rights Watch news release, August 16, 2016.

¹⁹ Human Rights Watch interview with Hussam al-Ahmad, director, Daraya Media Office, August 23, 2016; Human Rights Watch interview with Mohammad Abi Rashed, Daraya Local Council and media activist, August 23, 2016; Human Rights Watch interview with Diya Abou Ahmad, doctor, Daraya Field Hospital, August 23, 2016.

²⁰ "Russia/Syria: War Crimes in Month of Bombing Aleppo," Human Rights Watch news release, December 1, 2016, <https://www.hrw.org/news/2016/12/01/russia/syria-war-crimes-month-bombing-aleppo>.

²¹ Human Rights Watch compiled these statistics from the sources listed in the text.

²² Human Rights Watch compiled these statistics from the sources listed in the text.

²³ Josie Ensor, "Russia 'Caught Out' Using Incendiary Weapons in Syria by its Own Channel Russia Today," *The Telegraph*, June 22, 2016, <http://www.telegraph.co.uk/news/2016/06/22/russia-caught-out-using-incendiary-weapons-in-report-by-own-chann/> (accessed December 6, 2016); Mary Wareham, "Incendiary Weapons Pose Civilian Threat in Syria," Human Rights Watch dispatch, June 21, 2016, <https://www.hrw.org/news/2016/06/21/dispatches-incendiary-weapons-pose-civilian-threat-syria>.

²⁴ Statement of Russia, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31, 2016 (notes from Human Rights Watch).

The use of incendiary weapons can be determined from many types of visual evidence. They include distinctive mid-air displays created by the bright burning trails of air-dropped incendiary weapons containing ZAB-series incendiary submunitions. Other indicators include the small but intense fires created by each submunition over the time it takes to burn out, as well as markings on the bomb casings and submunitions. The majority of witness accounts collected by Human Rights Watch and available video evidence indicate that fixed-wing jet aircraft and helicopters have been used to deliver air-dropped incendiary weapons in Syria. There has been at least one incident involving the use of a surface-launched incendiary weapon. Since November 2012, Human Rights Watch has recorded the use of four types of incendiary weapons in Syria, all ZAB-series (Zazhigatel'naya Aviatsionnaya Bomba) incendiary aircraft bombs manufactured by the Soviet Union:

- RBK-500 ZAB 2.5S/M bombs, each containing 117 ZAB 2.5S/M incendiary submunitions,
- RBK-250 ZAB-2.5 bombs, each containing 48 ZAB-2.5 incendiary submunitions,
- ZAB-100-105 bombs, each containing nine incendiary cartridges, and
- ZAB-500 unitary incendiary bombs.²⁵

Idlib Governorate

In the evening of August 7, 2016, Syrian or Russian jet aircraft dropped incendiary weapons on Idlib city, wounding up to 10 people.²⁶ The incendiary weapons landed on at least four locations: the university's faculty of humanities in al-Dabbat, the residential neighborhood Hay al-Jam'aa, and the two industrial areas of al-Konsorwa and al-Ghazl.²⁷ According to witnesses, there were no armed groups in the vicinity of the strike sites.²⁸

Videos and photographs of the attacks and the remnants left behind show RBK-500 ZAB-2.5SM incendiary bombs manufactured by the Soviet Union, each of which delivers 117 incendiary submunitions.

Witnesses to the attacks in Idlib described a frightening scene. According to a member of Syria Civil Defense, "The fire took over everything, houses, cars, oil tanks, and even

²⁵ "Syria/Russia: Incendiary Weapons Burn in Aleppo, Idlib," Human Rights Watch news release, August 2016.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid. (quoting Mohammad Taj al-Din Othman and Ala' Abdel Aziz Hmeidan, Idlib residents).

grass. We heard explosions.... It was so bright you could see the buildings as if it was daylight. It was absolutely abnormal. Honestly, words cannot describe it.”²⁹ An Idlib resident recalled, “It was tragic, buildings were on fire, rocks were on fire.”³⁰ Incendiary bombs “fell between houses and people were terrified and started panicking, they even went out of their homes.”³¹ At least two people reportedly suffocated as a result of the attacks.³²

The difficulty of putting out the fires caused by the incendiary weapons exacerbated the situation. Two teams from Syria Civil Defense were required to extinguish the flames, and they gathered and destroyed remnants of the incendiary weapons even though they had no expertise on how to do so safely. A volunteer told Human Rights Watch, “The fire was vast, spreading hundreds of meters, difficult to put out.... It was huge. It required immense efforts to extinguish.... It took us around an hour to control the situation.”³³

Damascus Governorate

Incendiary weapons hit a field hospital in Daraya, in the suburbs of Damascus, on August 19, 2016. Dr. Diya Abou Ahmad was in the hospital at the time of the attack and later told Human Rights Watch, “Fires erupted and burned the whole building, along the equipment... Now it’s out of service.” He added, “Plastic, wood, everything burned. The fire ate everything.”³⁴

Mohammad Abi Rashed from the local council said that when he arrived at the scene to help rescue people, “[t]he whole building was on fire.” He reported, “An empty oxygen bottle blew up in one of the rooms.... The flames passed through the vents, and the operating room was soon on fire.” Abi Rashed recalled that once he and other rescuers entered the hospital, “we got lost in the dust, the smoke, and the burning smell.” Like two other witnesses, Abi Rashed vividly remembered the smell. He told Human Rights Watch, “The burning smell was awful. It smelled like burning fuel. Wait, no. Fuel doesn’t smell as bad.”³⁵

²⁹ Ibid. (quoting Syria Civil Defense volunteer).

³⁰ Ibid. (quoting Ala’ Abdel Aziz Hmeidan, Idlib resident).

³¹ Ibid. (quoting Mohammad Taj al-Din Othman, Idlib resident).

³² Ibid. (quoting Yahya A’arja, Idlib director of Syria Civil Defense).

³³ Ibid. (quoting Syria Civil Defense volunteer).

³⁴ Human Rights Watch interview with Diya Abou Ahmad, doctor, Daraya Field Hospital, August 23, 2016.

³⁵ Human Rights Watch interview with Mohammad Abi Rashed, Daraya Local Council and media activist, August 23, 2016.

The attacks led to panic as people desperately tried to flee the burning hospital. Dr. Ahmad who was inside the building “escaped as soon as the fire began spreading.”³⁶ On his way to rescue people trapped in the hospital, Abi Rashed saw “people running towards the civil defense center, they were all in a state of panic.” He said, “It was unbelievable.... Patients, doctors, people inside, just wanted to escape alive. Even the volunteers weren’t focused because of the sound of planes in the sky.”³⁷

Volunteers working with limited means struggled to put out the fire. Abi Rashed, who referred to incendiary weapons as “napalm,” said the fire was “difficult to control.” He explained: “One of the napalm barrels was buried in a hole. When they poured water over, it made the water boil. Imagine also, when we tried to pick the barrel up the next day, it caught fire with the wind.”³⁸ Hussam al-Ahmad, director of the Daraya Media Office told Human Rights Watch that the fires injured five medical personnel and destroyed the entire hospital.³⁹

According to Abi Rashed, many residents now fear incendiary weapons more than other weapons. He said,

People, whenever there’s a strike, hope it’s just a barrel bomb. They wait for the sound of an explosion. They hope it’s not napalm. Look how bad the situation is, it’s like barrels are *halal* and napalm is *haram* now.⁴⁰

Aleppo Governorate

Human Rights Watch documented 15 incendiary weapon attacks on parts of opposition-held Aleppo governorate from June to August 2016. For example, they were dropped in the residential area of al-Mashhad in Aleppo city center, injuring a child, on August 7.⁴¹ Human Watch was unable to identify the specific type of incendiary weapon used in the attacks.

³⁶ Human Rights Watch interview with Diya Abou Ahmad, doctor, Daraya Field Hospital, August 23, 2016.

³⁷ Human Rights Watch interview with Mohammad Abi Rashed, Daraya Local Council and media activist, August 23, 2016.

³⁸ Ibid.

³⁹ Human Rights Watch interview with Hussam al-Ahmad, director, Daraya Media Office, August 23, 2016.

⁴⁰ Human Rights Watch interview with Mohammad Abi Rashed, Daraya Local Council and media activist, August 23, 2016.

⁴¹ “Syria/Russia: Incendiary Weapons Burn in Aleppo, Idlib,” Human Rights Watch news release, August 16, 2016.

Human Rights Watch documented additional incendiary weapons attacks in Aleppo in September. Photographs and video footage showed the use of incendiary weapons in al-Kallaseh and Bustan al-Qasr on September 22, in al-Asileh on September 23, and in al-Mashhad on September 25.⁴²

At about 5:30-6 p.m. on September 30, incendiary weapons struck the al-Sha'ar neighborhood, setting several buildings on fire, including three hospitals.⁴³ A journalist for On-the-Ground News (OGN), an activist news organization, witnessed the attack and told Human Rights Watch:

I saw an airplane flying above. I then saw a puff of smoke in the air and several objects flying in different directions. One of those objects fell behind me. It looked like a coal-looking substance in flames. It burned for 5 to 6 minutes, then turned to ash, glowing, like when a fire dies.⁴⁴

Dr. Abu al-Motassim said that “[o]ne of the strikes landed on top of the hospital and another at the end of our street.” The attack led to “intense fear, chaos and panic” among the civilian population. Volunteers and doctors tried to put out the fires with dirt.⁴⁵

Previous Use in Syria

Earlier attacks in Syria illustrate the cruelty of incendiary weapons. On August 26, 2013, a ZAB-500 incendiary bomb was dropped on a school in Urm al-Kubra, Aleppo, which resulted in at least 37 civilian deaths—mostly children with an average age of 16—and 44 civilian injuries.⁴⁶

A female student who witnessed the bombs landing on her school in Aleppo told NBC News, “We just saw people burning.... My classmates were burning. It felt like Judgment Day.”⁴⁷ Dr. Saleyha Ahsan, a British emergency medicine doctor who was volunteering

⁴² “Russia/Syria: War Crimes in Month of Bombing Aleppo,” Human Rights Watch news release, December 1, 2016.

⁴³ “UN: Demand End to Unlawful Aleppo Attacks,” Human Rights Watch news release, October 3, 2016, <https://www.hrw.org/news/2016/10/03/un-demand-end-unlawful-aleppo-attacks>.

⁴⁴ “Russia/Syria: War Crimes in Month of Bombing Aleppo,” Human Rights Watch news release, December 1, 2016 (quoting Human Rights Watch phone interview with On-the-Ground News journalist).

⁴⁵ *Ibid.* (quoting Human Rights Watch phone interview with Dr. Abu al-Motassim).

⁴⁶ Violations Documentation Center in Syria, *Burning to Death: A Special Report on the Use of Incendiary Bombs in Aleppo and Dara'a Governorates*, October 2013, <http://www.vdc-sy.info/pdf/reports/1382274490-English.pdf> (accessed November 6, 2016), pp. 8-12.

⁴⁷ Elizabeth Chuck, “Doctor: Napalm-Like Attack on Syrian Schoolkids was ‘Apocalyptic,’” *NBC News*, August 30, 2013, http://worldnews.nbcnews.com/_news/2013/08/30/20262021-doctor-napalm-like-attack-on-syrian-schoolkids-was-apocalyptic (accessed November 6, 2016).

at Atarib Hospital at the time, treated many of the victims, including 15-year-old Anas Said Ali. Dr. Ahsan told Human Rights Watch:

The hair on his head almost melted to his head and he had ... fragment[s] stuck to the side of his face and hair. His face was swollen and it was difficult for him to open his eyes.... He died two weeks later from complications caused by the severe burns.⁴⁸

Several sources, including the UN-mandated Independent International Commission of Inquiry, reported that there were no military targets in the area of the school.⁴⁹

On December 3, 2012, Syrian government forces dropped incendiary ZAB-2.5 submunitions on Quseir, Homs, causing similar harm. The attack injured at least 19 civilians and set fire to a school and at least eight homes. An activist in Quseir who witnessed the attack told Human Rights Watch:

[W]hen I reached the school, I saw at least seven bombs burning on the playground and releasing white smoke that had a terrible smell.... When I went to the field hospital there were at least 20 wounded people—that included women and children. I saw at least three of them severely burned, like I have never seen before.⁵⁰

The activist added that the Free Syrian Army opposition group was not active in the school.⁵¹

Such accounts serve as a reminder of the potential for any incendiary weapon attack to cause excruciating pain and long-term suffering.

White Phosphorus

The year 2016 saw the use of white phosphorus munitions in Iraq and Yemen. Human Rights Watch has confirmed that each of the strikes described below involved white phosphorus, but exactly how the munitions were being used remains unclear.

⁴⁸ Email message from Dr. Saleyha Ahsan, to Human Rights Watch, November 4, 2013.

⁴⁹ Human Rights Watch, *Syria's Use of Incendiary Weapons*, pp. 15-16 (citing reports from two local activists and Dr. Saleyha Ahsan, a British emergency medicine doctor).

⁵⁰ *Ibid.*, p. 12.

⁵¹ *Ibid.*

Iraq

A photograph published on a Pentagon-managed public affairs website on August 14, 2016, showed the use of ground-fired white phosphorus munitions by US forces in northern Iraq.⁵² Col. Joseph Scrocca, the public affairs director for the US-led coalition in Iraq, told the *Washington Post* that the white phosphorus rounds were used for “screening and signaling.”⁵³ Echoing that statement, Air Force Col. John Dorrian, another spokesman for coalition, acknowledged that US forces were using white phosphorus in Iraq for “screening, obscuring, and marking” purposes, but he could or would not say how often white phosphorus was used or whether it had ever been used against enemy combatants or enemy objects.⁵⁴

On the morning of October 20, 2016, news photographer Bryan Denton observed and documented the use of four white phosphorus munitions in the outskirts of Karemlash; several more were fired that afternoon.⁵⁵ Amnesty International, citing Denton’s photographs and testimony, condemned the attack, explaining that civilians fleeing Mosul or residents returning to check on their homes “may pass through the contaminated area” and face a serious risk of harm.⁵⁶ It is not yet clear who fired these white phosphorus projectiles.⁵⁷ The dispersal pattern of the white phosphorus projectiles, however, appeared “consistent with the US-made 155-mm M825A1 projectile, which ejects 116 felt wedges containing white phosphorus over an area between 125-250 metres wide.”⁵⁸

Yemen

The media reported in September 2016 that the Saudi Arabia-led coalition has used white phosphorus munitions in Yemen, although the exact locations have not been determined.⁵⁹ At the request of the *Washington Post*, Human Rights Watch examined

⁵² First Lt. Daniel Johnson, “The Gun Raid [Image 1 of 3],” US Army, *Defense Video Imagery Distribution System*, August 14, 2016, <https://www.dvidshub.net/image/2860538/gun-raid#> (accessed November 9, 2016).

⁵³ Thomas Gibbons-Neff, “U.S. Forces are Using White Phosphorus Munitions in Iraq but It’s Unclear Exactly How,” *Washington Post*, September 23, 2016, <https://www.washingtonpost.com/news/checkpoint/wp/2016/09/23/u-s-forces-are-using-white-phosphorus-munitions-in-iraq-but-its-unclear-exactly-how/> (accessed November 9, 2016).

⁵⁴ *Ibid.*

⁵⁵ Email from Bryan Denton, news photographer, to Human Rights Watch, October 27, 2016.

⁵⁶ “Iraq: Use of White Phosphorus Munitions Puts Civilians at Grave Risk,” Amnesty International news release, October 28, 2016, <https://www.amnesty.org/en/latest/news/2016/10/iraq-use-of-white-phosphorus-munitions-puts-civilians-at-grave-risk/> (accessed November 6, 2016).

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

⁵⁹ Thomas Gibbons-Neff, “Saudi Arabia Appears to be Using U.S.-Supplied White Phosphorus in its War in Yemen,” *Washington Post*, September 19, 2016, <https://www.washingtonpost.com/news/checkpoint/wp/2016/09/19/saudi-arabia-appears-to-be-using-u-s-supplied-white-phosphorus-in-its-war-in-yemen/> (accessed November 6, 2016); Ben Norton, “America’s Deadly Gift: U.S. Gave Saudi Arabia Skin-Burning White Phosphorus. Questions Remain about How

videos and photographs uploaded to social media and positively identified the munitions depicted as white phosphorus munitions.⁶⁰ It has obtained no information regarding casualties from the use of the munitions.

The white phosphorus munitions may have been supplied to the Saudi Arabia-led coalition by the United States.⁶¹ After reviewing a photograph on social media, a US official said that the depicted white phosphorus mortar shell “appeared to be American in origin but [he] could not trace it to a particular sale because some of the markings were obscured.”⁶² US State Department officials confirmed that the US government has sold white phosphorus munitions to Saudi Arabia in the past but declined to say how much had been transferred or when.⁶³ One official told the *Washington Post* that the department was looking into reports of improper usage of US-supplied white phosphorus munitions.⁶⁴ A spokesman for the Saudi-led coalition, Maj. Fahad Abdullah Alkrk, stated in an email to the *Washington Post* that the coalition has not used white phosphorus munitions in their operations in Yemen.⁶⁵ He did not clarify, however, if the munitions could have been fired into Yemen from the Saudi border.⁶⁶

It’s Being Used in Yemen,” *Salon*, September 30, 2016, <http://www.salon.com/2016/09/30/secret-weapon-the-u-s-gave-saudi-arabia-skin-burning-white-phosphorus-questions-remain-about-how-its-being-used-in-yemen/> (accessed November 5, 2016);

⁶⁰ For more information on videos and photographs, see Gibbons-Neff, “Saudi Arabia Appears to be Using U.S.-Supplied White Phosphorus in its War in Yemen,” *Washington Post*.

⁶¹ *Ibid.*; Norton, “America’s Deadly Gift,” *Salon*.

⁶² Gibbons-Neff, “Saudi Arabia Appears to be Using U.S.-Supplied White Phosphorus in its War in Yemen,” *Washington Post*.

⁶³ *Ibid.*; Norton, “America’s Deadly Gift,” *Salon*.

⁶⁴ Gibbons-Neff, “Saudi Arabia Appears to be Using U.S.-Supplied White Phosphorus in its War in Yemen,” *Washington Post*.

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

III. Protocol III: Shortcomings and Solutions

The ongoing use of incendiary weapons highlights the need to strengthen CCW Protocol III on Incendiary Weapons. State parties to the CCW adopted Protocol III by consensus in October 1980 in order to regulate the use of incendiary weapons and reduce the harm that they cause.⁶⁷ The drafters of the protocol sought to establish protections against the suffering caused by incendiary weapons by restricting the circumstances in which such weapons could be employed.⁶⁸ To this end, Protocol III limited the use of incendiary weapons in “concentrations of civilians” and in attacks on “forests and other kinds of plant cover.”⁶⁹

After a quarter of a century with no end to reports of the use of these cruel weapons, it is time for Protocol III to be amended to more fully achieve its objective. Strengthening the protocol would be legally, if not politically, simple. Small changes to the text could have significant humanitarian benefit. The definition should be tightened to close a current loophole that allows for the use of multipurpose incendiary munitions. The regulations should also be bolstered to protect civilians from the harm caused by incendiary weapons regardless of the method of delivery.

An amended Protocol III is vital to increasing civilian protection from the harm caused by incendiary weapons. It would create stricter obligations for states parties and increase the stigma surrounding the use of incendiary weapons, thereby influencing the actions of both states not party and non-state armed groups. Furthermore, a stronger protocol would provide a more powerful basis for public condemnation of the use of incendiary weapons and send a clear message that inappropriate use of these weapons will not be tolerated.

⁶⁷ Convention on Conventional Weapons (CCW) Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), adopted October 10, 1980, 1342 U.N.T.S. 171, entered into force December 2, 1983.

⁶⁸ *Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts: Volume 1 (Geneva, 1974-1977)*, http://www.loc.gov/rr/frd/Military_Law/pdf/RC-records_Vol-1.pdf (accessed October 28, 2015), p. 215. The *Official Records* of the conference state that participants believed that “the suffering of the civilian population and combatants could be significantly reduced if agreements can be attained on the prohibition or restriction for humanitarian reasons of the use of specific conventional weapons, including any which may be deemed to be excessively injurious or to have indiscriminate effects,” and as one action in response, “devoted efforts to the further narrowing down of divergent views on the desirability of prohibiting or restricting the use of incendiary weapons, including napalm.” *Ibid.*, p. 215.

⁶⁹ CCW Protocol III, art. 2.

A More Comprehensive Definition

The definition of incendiary weapons in Protocol III should be amended to focus on the incendiary effects of the weapons.⁷⁰ Article 1 of the current protocol creates two major loopholes to regulating the use of incendiary weapons. First, it defines an incendiary weapon as any weapon that is “primarily designed” to set fire or burn targets.⁷¹ As a result, the applicability of Protocol III depends on how the developer, manufacturer, and/or user describe the purpose of a weapon. The nature or magnitude of impact of the weapon is not taken into account, as long as its primary purpose is considered beyond the scope of the protocol.

Second, Protocol III’s definition does not encompass munitions with “incidental incendiary effects, such as illuminants, tracers, smoke or signalling systems.” Some say multipurpose weapons, including white phosphorus, fall within this definitional loophole because their incendiary effects are only incidental. As a result, the current definition could be read to allow states parties to use white phosphorus munitions even though the munitions’ incendiary effects are as cruel as those of other incendiary weapons.

The definition of incendiary weapons in Protocol III should be amended to focus on the effects of incendiary weapons on people—the cruel nature of the injuries they cause and their tendency to injure soldiers and civilians without distinction—regardless of the purpose for which weapons are primarily designed. In addition, the protocol’s incidental effects clause should be changed to exempt munitions only when their incendiary effects are both minimal and incidental. This amended definition would encompass white phosphorus and other weapons that cause significant suffering through fire and heat yet are not clearly included in the existing definition. It would thus reduce civilian harm while allowing military commanders to retain the ability to

⁷⁰ Article 1 of Protocol III defines incendiary weapons as follows:

“Incendiary weapon” means any weapon or munition which is primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat, or combination thereof, produced by a chemical reaction of a substance delivered on the target.

(a) Incendiary weapons can take the form of, for example, flame throwers, fougasses, shells, rockets, grenades, mines, bombs and other containers of incendiary substances.

(b) Incendiary weapons do not include:

(i) Munitions which may have incidental incendiary effects, such as illuminants, tracers, smoke or signalling systems;

(ii) Munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour-piercing projectiles, fragmentation shells, explosive bombs and similar combined-effects munitions in which the incendiary effect is not specifically designed to cause burn injury to persons, but to be used against military objectives, such as armoured vehicles, aircraft and installations or facilities.

⁷¹ *Ibid.*, art. 1(1) (emphasis added).

use certain munitions, such as those for marking and signaling, as long as they had minimal incendiary effects.

Stronger Rules on Use

Protocol III should be further strengthened to prohibit the use of incendiary weapons in civilian areas regardless of delivery system. The protocol currently prohibits the use of air-dropped incendiary weapons in “a concentration of civilians,” but it imposes less restrictive regulations on surface-launched incendiary weapons.⁷² Article 2(3) prohibits surface-launched attacks within a concentration of civilians except when the “military objective is clearly separated from the concentration of civilians” and “all feasible precautions are taken” to minimize effects on civilians.

Protocol III’s inconsistent provisions are a result of the political landscape that the drafters were facing when the instrument was negotiated in the 1970s. Air-dropped napalm was used heavily throughout the Vietnam War and at the time was seen as a more serious threat than surface-launched incendiary munitions.⁷³ This outdated historical distinction ignores the reality that air- and ground-delivered incendiary weapons have the same harmful impacts.

Replacing the flawed regulations with a complete ban on incendiary weapons would have the greatest humanitarian benefit. In addition to strengthening binding law, an absolute prohibition would maximize the stigmatization of use and contribute to the pressure put on states to stop using incendiary weapons. There is ample precedent for

⁷² Protocol III defines a “concentration of civilians” as “any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads.” Protocol III, art. 1(2).

⁷³ The Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts (CDDH) was convened in 1974 in order to consider the prohibition or restriction of the use of conventional weapons that may cause “excessive injury” or have “indiscriminate effects.” As a result, a Conference of Government Experts on the Use of Certain Conventional Weapons was held in Lucerne in 1974. During this conference, experts advocated in favor of either a total ban or mere restrictions on the use of incendiary weapons. The final report from this group emphasizes the dangerousness of air-dropped incendiary weapons in particular. This focus may shed light on the otherwise seemingly arbitrary distinction in Protocol III that has weaker regulations for incendiary weapons based on method of delivery. The 1974 report explains, for example, “One expert noted that it was the practice in his country to classify air delivered incendiary munitions ... as ‘firebombs.’ Firebombs contain scatter-type agent, generally napalm, and have been extensively used in recent conflicts both as anti-materiel weapons and as antipersonnel weapons.... These experts stressed that firebombs had also been used against civilian houses and dwellings.” International Committee of the Red Cross (ICRC), *Report on the Conference of Government Experts on the Use of Certain Conventional Weapons (Lucerne, 24.9-18.10.74)* (Geneva: International Committee of the Red Cross, 1975), http://www.loc.gov/rr/frd/Military_Law/pdf/RC-conf-experts-1974.pdf (accessed October 28, 2015), pp. 20-22.

such bans, including in the CCW, which prohibits blinding lasers and weapons containing non-detectable fragments.⁷⁴

At a minimum, however, CCW states parties should eliminate the distinction between air-dropped and surface-launched incendiary weapons and extend the Article 2 prohibition of attacks in civilian areas to all types of incendiary weapons. From a humanitarian perspective, the delivery system of an incendiary weapon—be it airplane, artillery, rocket, mortar, or any other—is irrelevant. In addition, the exception for “clearly separated” military objectives presents risks for civilians given the wide area effect of incendiary weapons, especially ground-launched models, and the frequency with which targets are missed.⁷⁵

⁷⁴ CCW Protocol on Blinding Laser Weapons (Protocol IV), adopted October 13, 1995, entered into force July 30, 1998; CCW Protocol on Non-Detectable Fragments (Protocol I), adopted October 10, 1980, entered into force December 2, 1983.

⁷⁵ Ground-launched models in the form of multi-barrel systems, tube artillery, and large mortars are particularly known for having wide area effects.

IV. Diplomatic Momentum

In recent years, states and other international actors have recognized the problems of incendiary weapons and called for amendments to Protocol III. States parties first voiced such concerns in 2010 following civilian harm from the Israel Defense Forces' white phosphorus attacks on Gaza.⁷⁶ Since then, more than 35 states, the UN secretary-general, the International Committee of the Red Cross (ICRC), and nongovernmental organizations (NGOs) have expressed concerns about the use of incendiary weapons at annual meetings of CCW states parties and in other fora, as well as in correspondence with Human Rights Watch.⁷⁷ At the CCW's Meeting of States Parties in November 2015, more countries addressed the use of incendiary weapons than at previous meetings, and seven states parties spoke for the first time on the issue of incendiary weapons.⁷⁸ Diplomatic momentum continued to build in 2016. At least 15 countries raised concerns about incendiary weapons at a Preparatory Committee for the CCW's Fifth Review Conference at the end of August 2016,⁷⁹ and during the annual session of the UN First Committee on Disarmament and International Security in October-November 2016.⁸⁰ Given the growing concern among CCW states parties regarding the use of incendiary weapons, the time is ripe for them to take concrete steps to address the problems presented by incendiary weapons at the 2016 Review Conference.

⁷⁶ Statement of Canada, CCW Meeting of High Contracting Parties, Geneva, November 24, 2010 (notes from Human Rights Watch); Statement of Croatia, CCW Meeting of High Contracting Parties, Geneva, November 24, 2010, (notes from Human Rights Watch); Statement of Djibouti, CCW Meeting of the High Contracting Parties, Geneva, November 24, 2010. ⁷⁷ Statements of Austria, Australia, Belgium, Canada, Colombia, Costa Rica, Croatia, Cyprus, Djibouti, Ecuador, Estonia, France, Germany, the Holy See, Honduras, India, Ireland, Latvia, Lithuania, Mauritius, Mexico, Montenegro, the Netherlands, New Zealand, Nigeria, Norway, Pakistan, Palestine, Qatar, Slovenia, Switzerland, the United States, and Zambia, CCW Fourth Review Conference, Geneva, November 2011, and Meetings of High Contracting Parties, Geneva, November 2012, 2013, 2014, and 2015. See also Statement of the UN Secretary-General, CCW Meeting of High Contracting Parties, November 15, 2012; Statement by the UN Mine Action Service, CCW Meeting of High Contracting Parties, November 15, 2012; Statements of ICRC, CCW Fourth Review Conference, Geneva, November 2011, and Meetings of High Contracting Parties, Geneva, November 2012, 2013, 2014, and 2015. Human Rights Watch received letters regarding incendiary weapons from the following: Slovenia (2015); Cyprus, Estonia, Finland, Jamaica, Kazakhstan, Latvia, Mauritius, Mexico, Moldova, Saudi Arabia, and Slovenia (2012); Austria, Belgium, Canada, Estonia, Honduras, Ireland, New Zealand, Qatar, Saudi Arabia, and Switzerland (2011). The UN Commission of Inquiry on Syria has also expressed concern about the use of incendiary weapons, specifically barrel bombs with incendiary effects. UN Commission of Inquiry on Syria, *7th Report of the Independent International Commission of Inquiry on the Syrian Arab Republic*, A/HRC/25/65, February 12, 2014, Annex VI, paras. 3, 4, and 22.

⁷⁸ Bulgaria, Costa Rica, India, Montenegro, Russia, Slovenia, and Zambia discussed incendiary weapons at a meeting of states parties for the first time in 2015.

⁷⁹ See Statements of Belgium, Canada, Ecuador, France, India, Ireland, New Zealand, Russia, Switzerland, the United Kingdom, the United States, and Zambia, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31-September 2, 2016.

⁸⁰ See Statements of the European Union, the Holy See, New Zealand, and the State of Palestine, UN General Assembly (UNGA) First Committee on Disarmament and International Security, New York, October 2016.

Concerns and Condemnation

Many states parties have taken a strong stance against incendiary weapons over the past year, condemning the use of the weapons in recent armed conflicts. The Final Report of the 2015 CCW Meeting of States Parties acknowledged states parties' concerns, and many states made even stronger statements at that meeting.⁸¹ For example, France condemned the use of incendiary weapons in Syria, and called upon Syria, which is not party to CCW, to adhere to Protocol III.⁸² Ecuador reiterated its standing condemnation of all weapons prohibited under international humanitarian law and expressed "grave consternation" at reports of the use of incendiary weapons in Syria, Libya, Ukraine, and Yemen.⁸³ Colombia declared that the continued use of incendiary weapons contravenes the CCW regime and denounced the use of incendiary weapons, which have an indiscriminate effect on civilian populations.⁸⁴ Zambia noted the "dreadful damage that incendiary weapons inflict on civilians," and also condemned their use.⁸⁵ Slovenia stated that it agreed with other states parties that had condemned the use of incendiary weapons. New Zealand added its condemnation of use at the 2016 Preparatory Committee, describing its "horror and deep concern" about use in Syria.⁸⁶

As in previous years, several of the states that expressed concern about use called for better compliance with Protocol III. The United States noted "concerning reports that incendiary weapons continue to be used in an indiscriminate manner against civilian populations," and highlighted the need to universalize the CCW and its protocols.⁸⁷ Montenegro expressed its deep concern about the suffering caused by incendiary weapons and emphasized the importance of full implementation of Protocol III.⁸⁸ Ireland also expressed concern about reports of the use of incendiary weapons and reiterated "the need for all parties to conflicts to comply strictly with CCW Protocol III."⁸⁹ The United Kingdom took a similar position during the 2016 Preparatory Committee.⁹⁰

⁸¹ CCW Meeting of High Contracting Parties, "Final Report," CCW/MSP/2015/9, Geneva, November 12-13, 2015 (stating, "The Meeting noted the concerns raised by a number of High Contracting Parties over the allegations of use of incendiary weapons against civilians.").

⁸² Statement of France, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁸³ Statement of Ecuador, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015 (IHRC translation).

⁸⁴ Statement of Colombia, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015 (IHRC translation).

⁸⁵ Statement of Zambia, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁸⁶ Statement of New Zealand, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31, 2016.

⁸⁷ Statement of the United States, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁸⁸ Statement of Montenegro, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁸⁹ Statement of Ireland, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁹⁰ Statement of the United Kingdom, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31, 2016.

In a November 2015 letter to Human Rights Watch, Russia acknowledged the “significant humanitarian damage” caused by incendiary weapons in Syria and Ukraine, which it attributed to “improper use” and lack of compliance with international humanitarian law.⁹¹ As noted above, however, Human Rights Watch has since found compelling evidence that Russian government aircraft have been used to deliver incendiary weapons or at least have participated in incendiary weapons attacks by Syrian government aircraft.⁹² At the Preparatory Committee on August 2016, Russia denied that it had used incendiary weapons in its joint operation with Syrian government forces on opposition-held areas.⁹³ At the First Committee meeting in November 2016, Russia decried Ukraine's past use of incendiary weapons but did not address its own policy on the weapons.⁹⁴

Calls to Review and Strengthen Protocol III

Since November 2015, many states have echoed earlier calls to review Protocol III through formal or informal processes. At the 2015 Meeting of States Parties, the Holy See proposed “to put in place a Group of Governmental Experts ... for the revision of the protocol on incendiary weapons.”⁹⁵ Zambia advised “that a new mandate that sets aside time to discuss the implementation and adequacy of Protocol III could be considered, including need to strengthen Protocol III.”⁹⁶ Ecuador stated its support for discussions aimed at strengthening and eliminating gaps in Protocol III.⁹⁷ Austria also announced that it “is in favor of discussing proposals to strengthen Protocol III.”⁹⁸

At the 2016 Preparatory Committee, Switzerland said it was important to discuss Protocol III given recent use.⁹⁹ As explained further below, it also proposed including language in the Review Conference’s Final Declaration that would reflect “the calls by a number of High Contracting Parties for discussion.”¹⁰⁰

⁹¹ Letter from Russian Federation Minister of Foreign Affairs Sergey Lavrov, to Human Rights Watch, November 6, 2015.

⁹² “Syria/Russia: Incendiary Weapons Burn in Aleppo, Idlib,” Human Rights Watch news release, August 16, 2016.

⁹³ Statement of Russia, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31, 2016 (notes from Human Rights Watch).

⁹⁴ Statement of Russia, UNGA First Committee on Disarmament and International Security, New York, November 1, 2016.

⁹⁵ Statement of the Holy See, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁹⁶ Statement of Zambia, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁹⁷ Statement of Ecuador, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015 (IHRC translation).

⁹⁸ Statement of Austria, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

⁹⁹ Statement of Switzerland, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31, 2016.

¹⁰⁰ Proposal from Switzerland, “Non-Paper: Proposals Submitted in Writing under ‘Preparations for Main Committee I,’” CCW Fifth Review Conference Preparatory Committee, Geneva, August 31-September 1, 2016, p. 2.

Several states parties proposed concrete changes to Protocol III, which were generally consistent with the solutions discussed above. Croatia urged all actors to increase efforts to strengthen the rules governing incendiary weapons.¹⁰¹ Costa Rica argued that the moment had come to strengthen Protocol III in order to make it truly effective.¹⁰² Costa Rica specifically called for the adoption of an effects-based definition and a prohibition on all use in civilian areas, stating that the prohibition on incendiary weapons should not be limited to weapons launched from the air.¹⁰³ Switzerland encouraged states to consider the same issues.¹⁰⁴ Likewise, Zambia suggested “adopting ... an effects-based definition of incendiary weapons, and prohibiting, at a minimum, the use of all incendiary weapons in civilian areas” and stated that “consideration could also be given to an absolute ban as the greatest to afford humanitarian benefits.”¹⁰⁵

Only one state party, Russia, openly criticized proposals to amend Protocol III at the November 2015 Meeting of States Parties.¹⁰⁶

Several international and nongovernmental organizations, in addition to Human Rights Watch, have recommended that Protocol III be reviewed and/or strengthened. At the November 2015 Meeting of States Parties, the ICRC called for discussions on national policies and practices related to the use of incendiary weapons and “munitions that have incidental incendiary effects.”¹⁰⁷ At the same meeting, the UK-based NGO Article 36 stated:

When a weapon causes burn wounds that can spontaneously ignite as doctors remove the bandages to treat a patient, it is hard to argue that this is not excessively injurious. The wide area effects of incendiary weapons are also likely to make attacks indiscriminate, whether delivered by ground or air. In our view these two characteristics make incendiary weapons unacceptable. They should be prohibited.¹⁰⁸

¹⁰¹ Statement of Croatia, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹⁰² Statement of Costa Rica, CCW Meeting of High Contracting Parties, Geneva, November 13, 2015 (IHRC translation).

¹⁰³ Ibid.

¹⁰⁴ Statement of Switzerland, CCW Fifth Review Conference Preparatory Committee, Geneva, August 31, 2016 (notes from Human Rights Watch).

¹⁰⁵ Statement of Zambia, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹⁰⁶ Statement of Russia, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹⁰⁷ Statement of ICRC, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹⁰⁸ Statement of Article 36, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

The Dutch NGO PAX reiterated the value of a ban on incendiary weapons, which it described as “weapons that burn with effects so horrific that it is almost unbearable to imagine the impact.”¹⁰⁹

Support for Action at the 2016 Fifth Review Conference

Over the past year, many states have recommended that the Fifth Review Conference take up the issue of Protocol III. At the November 2015 Meeting of States Parties, Ecuador called for discussions with a view to introducing necessary amendments to Protocol III at the 2016 Review Conference.¹¹⁰ India stated that “the Fifth Review Conference is an important opportunity to review the implementation of the Convention as well as all its Protocols and specific measures to strengthen the CCW framework,” recommending that states parties “keep under review implementation of Protocol III on Incendiary Weapons.”¹¹¹ Montenegro argued that the use of incendiary weapons and the implementation of Protocol III should remain important issues for the CCW agenda.¹¹² Ireland stated “the continued applicability and relevance of Protocol III” ought to be considered during the conference.¹¹³ Switzerland noted the importance of reviewing the scope and operation of Protocol III, and other protocols, to ensure they “remain fully relevant and respond adequately to challenges arising from the severe effects of the weapons they cover.”¹¹⁴ Later, in August 2016, Switzerland proposed language on Protocol III for the Final Declaration that it requested the Review Conference consider.¹¹⁵ New Zealand also called for work at the Review Conference in a statement at the First Committee meeting in October 2016.¹¹⁶

In a 2016 working paper, the ICRC urged CCW states parties to take three steps at the 2016 Review Conference to address issues related to incendiary weapons. First, states should report on their policies and practices “with a view to minimizing their indiscriminate effects on civilians and unnecessary suffering to combatants.”¹¹⁷ Second, states should “report on measures taken to avoid foreseeable indiscriminate

¹⁰⁹ Statement of PAX, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹¹⁰ Statement of Ecuador, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹¹¹ Statement of India, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹¹² Statement of Montenegro, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹¹³ Statement of Ireland, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹¹⁴ Statement of Switzerland, CCW Meeting of High Contracting Parties, Geneva, November 12, 2015.

¹¹⁵ Proposal from Switzerland, “Non-Paper: Proposals Submitted in Writing under ‘Preparations for Main Committee I.’”

¹¹⁶ Statement of New Zealand, UNGA First Committee on Disarmament and International Security, New York, October 21, 2016.

¹¹⁷ ICRC, “Views and Recommendations for the Fifth Review Conference of the Convention on Certain Conventional Weapons,” working paper, CCW/CONF.5/WP.3, September 26, 2016, p. 6.

effects of munitions that have incidental incendiary effects.”¹¹⁸ Third, states should consider addressing such concerns in 2017, possibly by establishing “an informal meeting of experts to examine the military, technical, legal and humanitarian aspects of incendiary weapons and of weapons that have incidental incendiary effects.”¹¹⁹ The ICRC’s three recommendations highlight the cruel and indiscriminate nature of incendiary weapons and also encompass weapons with incidental incendiary effects, such as white phosphorus munitions. The last recommendation, for an informal meeting of experts, underscores the need for concrete action to deal with the humanitarian harm caused by these weapons.¹²⁰

¹¹⁸ *Ibid.*

¹¹⁹ *Ibid.*

¹²⁰ *Ibid.*, p. 5.

V. An Opportune Moment

Protocol III has long been seen as a flawed instrument. Even during the negotiations of the protocol, some states viewed it as inadequate. At a diplomatic conference in 1979, a delegate from Mexico stated that a majority of states supported a total prohibition on incendiary weapons.¹²¹ Nevertheless, because Protocol III was a product of negotiation and compromise, the conference failed to adopt an absolute ban.¹²² In 1980, at the conclusion of the process that produced the CCW, some states expressed disappointment at the weakness of Protocol III, especially its failure to prohibit all use of incendiary weapons.¹²³ Several recommended using future CCW review conferences to strengthen the protocol.¹²⁴ The first four review conferences failed to act, but the Fifth Review Conference, scheduled for December 2016, presents an opportunity to address shortcomings that have plagued the protocol from its inception.

The repeated and ongoing use of incendiary weapons in Syria and other armed conflicts around the world demonstrates the urgency of action. The diplomatic momentum that has been building since 2010, largely in response to recent use, suggests that the feasibility of amending the law is increasing. Together, the significant use of incendiary weapons in 2016 and the growing number of states speaking out should provide ample reason to strengthen Protocol III. This convergence of factors coincides with the Fifth Review Conference, presenting an opportune moment for states

¹²¹ Statement of Mexico, UN Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Committee of the Whole, Summary Record of the 5th Meeting, Geneva, September 21, 1979, A/CONF.95/CW/SR.5, September 24, 1979, para. 17. But see W. Hays Parks, "The Protocol on Incendiary Weapons," *International Review of the Red Cross*, vol. 279 (November-December 1990), pp. 535 and 538 (saying "there appeared to be little support for a total prohibition on incendiary weapons" at the preparatory conference).

¹²² ICRC, *Report on the Conference of Government Experts on the Use of Certain Conventional Weapons (Second Session—Lugano, 21.1-26.2.1976)* (Geneva: International Committee of the Red Cross, 1976), https://www.loc.gov/rr/frd/Military_Law/pdf/RC-conf-experts-1976.pdf (accessed October 28, 2015), p. 11, para. 23 ("As for the possibility, contents and form of proposals relating to the use of incendiary weapons, several experts emphasized once again the need for any agreement on this score to find the broadest support practicable. Experts were cautioned in this context against trying to ban forms of use of incendiary weapons that were considered essential from a military point of view.").

¹²³ See, for example, Statement of Mexico, UN Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Second Session, Committee of the Whole, Summary Record of the 15th Meeting, Geneva, October 8, 1980, A/CONF.95/CW/SR.15, October 21, 1980, paras. 8-9; Statement of Romania, UN Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Second Session, Committee of the Whole, Summary Record of the 14th Meeting, Geneva, October 3, 1980, A/CONF.95/CW/SR.14, October 10, 1980, para. 2.

¹²⁴ See, for example, Statements of Mexico, Finland, and Egypt, UN Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Second Session, Committee of the Whole, Summary Record of the 15th Meeting, Geneva, October 8, 1980, A/CONF.95/CW/SR.15, October 21, 1980, paras. 8-9, 11, and 15.

parties to take action. Every five years, CCW states parties convene a review conference. In their final declaration and final report, review conferences articulate the concerns of states parties, set priorities for future work, and establish mechanisms to implement its agenda. Bolstering humanitarian protections from incendiary weapons should be a major priority for the Fifth Review Conference.

Precedent for Change

The four previous CCW review conferences, held every five years since 1996, all involved efforts to expand the CCW in some capacity.¹²⁵ At the CCW's First Review Conference in 1995 and 1996,¹²⁶ states parties adopted Protocol IV to prohibit the use and transfer of blinding laser weapons.¹²⁷ At the Second Review Conference in 2001, states parties extended the convention's scope so it would apply in situations of non-international armed conflict.¹²⁸ They also established an open-ended Group of Governmental Experts (GGE) to address the problems posed by explosive remnants of war (ERW) and anti-vehicle mines.¹²⁹ The GGE drafted a new protocol on explosive remnants of war that was adopted by states in 2003 and entered into force in 2006.¹³⁰ While states parties could not reach agreement on an anti-vehicle mine protocol, 25 states committed to a declaration on the topic at the Third Review Conference in 2006.¹³¹

Discussions at CCW review conferences have also sparked disarmament successes in other venues. At the First Review Conference, CCW states adopted an amended version of Protocol II on landmines, booby-traps, and other devices. The protocol was criticized as insufficient, but it led to the negotiation and adoption, outside of the CCW, of the

¹²⁵ CCW Review Conferences were held in 1995/1996, 2001, 2006, and 2011. The Fifth Review Conference is scheduled from December 12-16, 2016.

¹²⁶ The first session of the First Review Conference took place in Vienna from September 25 to October 13, 1995 and resumed from January 15 to 19, 1996. The second session was held from April 22 to May 3, 1996. See CCW First Review Conference, "Final Document, Part I: Final Report," CCW/CONF.I/16 (Part I), 1996, p. 6.

¹²⁷ See ICRC, *Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects*, https://www.icrc.org/eng/assets/files/other/icrc_002_0811.pdf (accessed December 6, 2016), p. 7.

¹²⁸ Louis Maresca, "Second Review Conference of the Convention on Certain Conventional Weapons," *International Review of the Red Cross*, no. 85, March, 31, 2002, <https://www.icrc.org/eng/resources/documents/article/other/59kc84.htm> (accessed December 8, 2016).

¹²⁹ *Ibid.*

¹³⁰ UN Office at Geneva, "CCW Protocol V on Explosive Remnants of War," [http://www.unog.ch/80256EE600585943/\(httpPages\)/C7DDB8CCD5DD3BB7C12571D8004247FA?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/C7DDB8CCD5DD3BB7C12571D8004247FA?OpenDocument) (accessed October 28, 2015).

¹³¹ UN Office at Geneva, "Mines Other than Anti-Personnel Mines (MOTAPM)," <http://www.unog.ch/80256EE600585943/%28httpPages%29/7FAEF7CE8B841EFAC12579C1002CAF88?OpenDocument> (accessed December 8, 2016); CCW Third Review Conference, "Final Document Part III: Declaration on Anti-Vehicle Mines," CCW/CONF.III/11 (Part III), November 7-17, 2006, p. 36.

1997 Mine Ban Treaty prohibiting antipersonnel landmines.¹³² In 2006, after states failed to take action on cluster munitions at the Third Review Conference, Norway announced the launch of the Oslo Process that resulted in the adoption of the 2008 Convention on Cluster Munitions.¹³³

The precedent of past review conferences serves as a reminder of the significance of this forum for action on disarmament issues.

Call to Action

States parties should seize the opportunity presented by the Fifth Review Conference to pursue significant work on incendiary weapons. Although lethal autonomous weapons systems, also known as fully autonomous weapons, are on the agenda too, states parties have historically dealt with more than one issue at a time at review conferences. States parties should acknowledge the ongoing and devastating use of incendiary weapons and take immediate steps to increase Protocol III's humanitarian protections against these weapons.

In particular, the 121 states parties to the CCW should agree to a new mandate on incendiary weapons, adopt a Final Declaration that reflects both the widespread outrage at the use of the weapons and the calls to revisit and amend Protocol III, condemn the use of incendiary weapons, and report on national practices and policies with respect to the weapons.

Agree to a New Mandate

States parties should approve, and include in the Final Report of the Review Conference, a new mandate on incendiary weapons setting aside time in 2017 to discuss the implementation and adequacy of Protocol III, and in particular amendments to strengthen Protocol III. Those discussions could examine the problems associated with incendiary weapons as well as the shortcomings of Protocol III and ways it could be strengthened. The discussions could come in a variety of forms, including an informal meeting of experts or a GGE.

¹³² See ICRC, *Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects*, p. 7.

¹³³ Human Rights Watch, *Meeting the Challenge: Protecting Civilians through the Convention on Cluster Munitions*, November 2010, <https://www.hrw.org/sites/default/files/reports/armsclusters1110webwcover.pdf>, pp. 112-113.

The new mandate should ensure that states parties discuss proposed amendments to Protocol III. These amendments should focus on adopting a definition of incendiary weapons that encompasses multipurpose munitions, such as white phosphorus, based on their substantial incendiary effects rather than the purpose for which they are designed. They should also include language prohibiting the use of incendiary weapons within or near concentrations of civilians under all circumstances, regardless of the method of delivery.

Adopt a Strong Final Declaration

States parties should adopt a Final Declaration that reflects the widespread condemnation of incendiary weapons and the many calls to revisit and to amend Protocol III. The language of the Final Declaration should be stronger than the draft text from October 2016. In addition to calling for implementation of Protocol III and compliance with international humanitarian law, the draft text says that “[t]he Conference notes the concerns raised by a number of High Contracting Parties over the reports of use of incendiary weapons against civilians.”¹³⁴

Human Rights Watch and IHRC object to the draft text’s elimination of the language from the 2011 Final Declaration that the Conference “notes the concerns raised ... including suggestions for further discussion on this matter.” The draft text includes no reference to the calls of many states parties for discussions of Protocol III and incendiary weapons. Because the 2016 draft text refers to concerns raised by incendiary weapons generally, it is broader in scope than the 2011 Final Declaration, which only noted concerns raised about “the offensive use of white phosphorus.”¹³⁵

At a minimum, the Review Conference should adopt the language proposed by the Swiss delegation at the Preparatory Committee in August 2016. At that meeting, Chile, Ireland, and Sweden supported the idea of including incendiary weapons language in the Final Declaration, and others may have since endorsed it.¹³⁶ The Swiss proposal reads:

- The Conference notes the provisions of this Protocol;

¹³⁴ Fifth CCW Review Conference, “Draft Final Declaration,” CCW/CONF.V/MC.I/L.1, October 10, 2016, p. 9.

¹³⁵ Final Document of the Fourth Review Conference, Part II: Final Declaration, CCW/CONF.IV/4/Add.1, 2011, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G11/652/03/PDF/G1165203.pdf?OpenElement> (accessed December 6, 2016).

¹³⁶ Human Rights Watch notes from CCW Fifth Review Conference Preparatory Committee, Geneva, September 1, 2016.

- The Conference notes the concerns raised by a number of High Contracting Parties over the growing number of reports of use of incendiary weapons against civilians;
- The Conference calls on all parties to armed conflicts to respect relevant rules of international humanitarian law, including the provisions of Protocol III where applicable; and
- The Conference notes the calls by a number of High Contracting Parties for discussion whether Protocol III adequately protects civilians and combatants from the severe consequences of weapons with incendiary effects.¹³⁷

The Swiss proposal improves on the August 2016 draft declaration, especially with its last paragraph, although it could be strengthened even more. For example, rather than “note the calls ... for discussion,” the declaration could “welcome proposals to review” Protocol III. Such a change would demonstrate that the states parties at the Review Conference actively support the concrete step of revisiting Protocol III, with eye to addressing the weapons’ “severe consequences.”

In addition, the declaration could add a final bullet, stating:

- The Conference welcomes proposals to amend Protocol III to ensure that it governs the use of all weapons with incendiary effects, regardless of how they are delivered.

This addition would send a clear message that the states parties intend to strengthen Protocol III and go beyond simply discussing whether or not the instrument is inadequate. It would also bolster stigma against the use of incendiary weapons simply by highlighting the support for stronger regulations on the weapons.

Condemn the Use

At the Fifth Review Conference, states parties to the CCW should also condemn the use of incendiary weapons. Such condemnation would have a stigmatizing effect influencing even actors outside the protocol. In particular, the states parties should publicly condemn incendiary weapon use in Syria and urge the Syrian government to accede to the Convention on Conventional Weapons and Protocol III. This public

¹³⁷ Proposal from Switzerland, “Non-Paper: Proposals Submitted in Writing under ‘Preparations for Main Committee I,’” p. 2.

condemnation of the use of incendiary weapons would send a clear message that the use of these weapons is unacceptable and will not be tolerated by the international community.

Report on Current National Practices and Policies

Finally, states parties at the Fifth Review Conference should heed the recommendation of the ICRC and others to report on current national practices and policies with respect to incendiary weapons as well as on measures taken to avoid the harmful effects of munitions with incidental incendiary effects. Transparency about these matters would promote accountability and highlight ways in which governments could better protect civilians and soldiers from these inhumane weapons.