



Incendiary Weapons: Recent Use and Growing Opposition

Memorandum to Convention on Conventional Weapons Delegates

November 2014

Introduction

As states party to the Convention on Conventional Weapons (CCW) convene for their annual meeting in November 2014, the matter of incendiary weapons is reaching a crossroads. Ongoing use of these exceptionally cruel weapons highlights the urgent need to take steps to prevent the civilian suffering they cause. Meanwhile, growing concern about incendiary weapons presents an opportunity to strengthen the international law governing them. Human Rights Watch and Harvard Law School's International Human Rights Clinic (IHRC) call on all nations and especially CCW states to publicly condemn the use of incendiary weapons, express support for reviewing CCW Protocol III on incendiary weapons, and work toward developing stronger protections for civilians.

This memorandum examines the devastating harm caused by incendiary weapons, including over the past year in Syria and Ukraine. It discusses how increased stigmatization of the use of these weapons has in some cases altered government behavior, a process exemplified by Israel's apparent decision not to use them in Gaza in 2014. The memorandum also critiques CCW Protocol III and identifies ways that it could be strengthened. Finally, it analyzes recent government positions on incendiary weapons.

Recommendations to CCW States

CCW states should begin formal discussions of Protocol III as soon as possible in order to mitigate the harmful effects of incendiary weapons, including white phosphorus. To move toward that end, states should:

- Condemn the use of incendiary weapons in their interventions at the November 2014 Meeting of States Parties.
- Ensure the final report of the meeting reflects concerns about incendiary weapons, as it has done for the past three years.
- Express support for efforts to commence formal discussions on Protocol III, with a view to strengthening it.

A comprehensive ban on the weapons would have the most far-reaching humanitarian benefits. At a minimum, CCW states should address the specific shortcomings of Protocol III by:

- Adopting a broader, effects-based definition of incendiary weapons that encompasses multipurpose munitions with incendiary effects, such as those containing white phosphorus, and
- Prohibiting the use of all incendiary weapons in civilian areas, regardless of whether they are air dropped or surface launched.¹

I. Overview of the Harm Caused by Incendiary Weapons

Incendiary weapons produce heat and fire through the chemical reaction of a flammable substance. Some such weapons are designed to burn people or materiel, others are meant to penetrate plate metal, and still others are created to produce smokescreens or provide illumination. Incendiary weapons can cause exceptionally painful thermal and respiratory burns, which can lead to complications such as shock, infection, and asphyxiation. Victims who survive their wounds often suffer long-term physical and psychological damage.²

Thermal Burns and Respiratory Damage

Because incendiary weapons burn at a very high temperature, victims feel excruciating pain on contact. The suffering does not stop there, however. The burns that result are typically slow to heal and difficult to treat. Recovery often takes weeks or months, and the daily changing of dressings has been likened to being “flayed alive.”³ Burn victims often experience a loss of appetite that exacerbates their weakened state and can lead to extreme malnutrition. Many victims die, and those who survive are left physically and psychologically scarred.⁴

Inhalation of hot gas and combustion products from incendiary weapons can cause respiratory burns and other pulmonary complications, including inhalation injuries, pneumonia, and the accumulation of fluid in the lungs.⁵ Victims may choke on the swelling and inflammation of their respiratory passages or be unable to breathe because of damage to the lungs or other

¹ For further discussion of these recommendations, see Human Rights Watch and Harvard Law School’s International Human Rights Clinic (IHRC), “Strengthening the Humanitarian Protections of Protocol III on Incendiary Weapons: Memorandum to Convention on Conventional Weapons Delegates,” August 2011, <http://www.hrw.org/news/2011/08/22/strengtheninghumanitarian-protections-protocol-iii-incendiary-weapons>.

² For more information on the harm caused by incendiary weapons, see Human Rights Watch and IHRC, “The Human Suffering Caused by Incendiary Munitions: Memorandum to Convention on Conventional Weapons Delegates,” March 2011, http://www.hrw.org/sites/default/files/related_material/2011_arms_incendiariespastharmanduse.pdf.

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

⁴ 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, pp. 30-32.

⁵ Stockholm International Peace Research Institute, *Incendiary Weapons* (Cambridge: The MIT Press, 1975), pp. 142-43.

tissues. They may develop serious infections due to injury to the respiratory tract. Victims can also die from the carbon monoxide and other noxious gases that incendiary weapons often emit.

Long-Term Effects and Permanent Damage

Injuries from incendiary weapons frequently cause lasting physical and psychological disabilities. Thick scarring can lead to loss of mobility, especially of the hands, which victims use when trying to wipe off the substance burning them.⁶ Victims also endure psychological trauma and an inability to assume former roles in society.⁷ Isolation during treatment and being forced to “confront ... the sight of one’s own naked and burned body ... and the stench of one’s own rotting flesh” can be particularly horrifying.⁸ Treatment of severe pain with drugs can result in dependency and later withdrawal symptoms. Victims sometimes find that they are shunned because of their severe scarring and disfigurement, which can lead to withdrawal from society.

White Phosphorus

While some argue that munitions containing white phosphorus fall outside the existing legal definition of “incendiary weapon,” such munitions should be considered a type of incendiary weapon because they cause similar kinds of effects as other incendiary munitions. Armed forces often justify the use of white phosphorus as a useful tool for illumination and smokescreening, but the harm it causes and the likelihood that it will be deployed indiscriminately or against civilians outweigh any benefits. First, white phosphorus weapons disperse felt wedges impregnated with the chemical over wide areas, increasing the risk that their use will have indiscriminate impact. Second, white phosphorus is highly soluble in fat, and thus in human flesh. When it comes into contact with skin, it causes severe thermal and chemical burns, often down to the bone, which are slow to heal and prone to infection.⁹ Because white phosphorus burns when exposed to oxygen, wounds that have been cleaned and dressed can reignite once the dressings are removed and the wounds are again exposed to the air. Furthermore, if there is a failure to remove all of the pieces of white phosphorus during medical treatment, those remaining may cause wounds to enlarge and deepen. White phosphorus may also enter the bloodstream through burns and cause multiple organ failure.

⁶ 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 it is a sticky substance that spreads when victims try to wipe it off their body.

⁷ Stockholm International Peace Research Institute, *Incendiary Weapons*, p. 146.

⁸ *Ibid.*, p. 149.

⁹ David J. Barillo, Leopoldo C. Cancio, and Cleon W. Goodwin, “Treatment of White Phosphorus and Other Chemical Burn Injuries at One Burn Center over a 51-Year Period,” *Burns*, vol. 30 (2004), p. 450.

For this reason, victims remain at risk of death throughout the lengthy treatment period, and burns caused by white phosphorus on only 10 percent of the body frequently prove fatal.¹⁰

II. Recent Use of Incendiary Weapons

The year 2014 saw continued use of incendiary weapons in Syria and new use in Ukraine. The attacks demonstrated the human suffering that incendiary weapons cause. At the same time, recognition that the weapons, including those with white phosphorus, are unacceptable appeared to be growing. For example, Russia seemed to try to take advantage of shifting attitudes when it presented evidence that it said proved Ukraine used white phosphorus weapons (Human Rights Watch determined that case did not involve white phosphorus). Israel avoided use of white phosphorus munitions during its 2014 military operations in Gaza, apparently due to a policy change resulting from the international criticism of its previous use in Gaza. Recent incidents involving the use of incendiary weapons underscore the urgency of dealing with the weapons, while their increased stigmatization suggests the time to address them is now.

Syria

Syrian government forces have repeatedly used incendiary weapons over the past two years, with most attacks occurring in 2013.¹¹ From November 2012 to the present, Human Rights Watch has documented at least 57 attacks using incendiary weapons in 8 of the country's 14 governorates. Four of those incidents caused a total of more than 40 civilian deaths and injuries to more than 70 other civilians.¹² The most recent incendiary attack for which Human Rights Watch has obtained video footage took place in Daraa on July 19, 2014. In March 2014, the UN Commission of Inquiry on Syria reported that government forces have also launched attacks using incendiary barrel bombs.¹³

The effects of the strikes on schools exemplify the danger incendiary weapons pose to civilians, especially when they are used in populated areas, and illustrate the horrific suffering that they

¹⁰ "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); and Global Security, "White Phosphorus," <http://www.globalsecurity.org/military/systems/munitions/wp.htm> (accessed October 21, 2014).

¹¹ For more information on use of incendiary weapons in Syria, see Human Rights Watch, "Syria's Use of Incendiary Weapons: Memorandum to Convention on Conventional Weapons Delegates," November 2013, http://www.hrw.org/sites/default/files/related_material/Arms_SyriaIncendiary_Nov13_Final_o.pdf.

¹² *Ibid.*, p. 3.

¹³ UN Commission of Inquiry on Syria, 7th Report of the UN Commission of Inquiry on Syria, A/HRC/25/65, February 12, 2014, <http://www.ohchr.org/EN/HRBodies/HRC/ICISyria/Pages/Documentation.aspx> (accessed October 25, 2014), Annex VI, paras. 3, 4, and 22.

cause.¹⁴ On August 26, 2013, for example, Syrian government forces dropped two incendiary bombs on a school in the town of Urm al-Kubra in northern Aleppo governorate. The strike killed at least 37 civilians, mostly teenagers, and wounded 44 others. Dr. Sahleyha Ahsan, a British emergency medicine doctor then working as a medical volunteer at Altarib Hospital, told Human Rights Watch: “Three bodies were in a pickup truck outside in the hospital courtyard. These bodies, of three female students, were unrecognizable due to the severity of the burns. It was also impossible to tell that they were in fact female but I was informed by hospital staff that they were. They had been in the direct hit area of the bomb.”

Dr. Ahsan also described the injuries to a 15-year-old boy: “The hair on his head almost melted to his head and he had ... fragments stuck to the side of his face and hairs. His face was swollen and it was difficult for him to open his eyes.” The boy, who had sustained burns to over 70 percent of his body, was transferred to a hospital in Turkey but died two weeks later.

Dr. Ahsan visited the school two days after the attack, when, she said, “the ground directly hit by the bomb was still smoking and the area hot.... The same acidic, acrid smell hung over the school and in the rubble where the bomb had hit.”

Months earlier, on December 3, 2012, the Syrian Air Force struck another school in Quseir, Homs, with incendiary weapons. A local activist told Human Rights Watch that at the time of the attack, he had observed at least seven bombs burning on the playground and releasing white smoke that emitted a noxious smell. He described what he saw in the aftermath of the attack: “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.” The attack also struck and damaged several residential buildings next to the school. According to the activist, no fighters of the Free Syrian Army, the presumed target of the attack, were present in the school at the time.

In addition to using more familiar incendiary weapons, Syrian government forces have also dropped barrel bombs containing incendiary materials. In most of the incendiary attacks that Human Rights Watch has documented, Syrian forces used one of three types of ZAB-series aircraft bombs manufactured by the Soviet Union. According to the March 2014 report of the UN Commission of Inquiry on Syria, however, Syrian forces have also dropped incendiary barrel bombs. Barrel bombs are improvised weapons that require less technical expertise to manufacture and hence are often made locally and at low cost. They have been used widely in Syria. Barrel bombs are notoriously indiscriminate because they lack guidance systems and kill and injure civilians across a wide area. Often they are simply rolled out of helicopters. The

¹⁴ The information on the incendiary strikes on schools is drawn from Human Rights Watch, “Syria’s Use of Incendiary Weapons,” pp. 11-16.

report of the Commission of Inquiry found, “Where barrel bombs were built as de facto incendiary weapons, they ... violated rules of international humanitarian law prohibiting the use of weapons that cause superfluous injury, unnecessary suffering or that are indiscriminate by nature.”¹⁵ While not all barrel bombs have incendiary effects, the ease with which they can be made and delivered along with their indiscriminate nature exacerbates the harm caused by incendiary weapons in the Syrian conflict.

Ukraine

Evidence of new use of incendiary weapons in Ukraine in 2014 is especially troubling. During field missions in August and October 2014, Human Rights Watch researchers documented use of incendiary weapons in Ilovaisk, a town 30 kilometers southeast of Donetsk, and Luhanskoe, a small village south of Donetsk. Residents of Ilovaisk told Human Rights Watch that weapons resembling fireworks fell on the northwest part of their town over the course of three nights and burned three homes. They could not pinpoint the date of the attack although one resident said it was after August 14, and possibly during a time when intense battles were taking place between Ukrainian forces and Russia-supported rebels. Human Rights Watch researchers also found in a field about 18 kilometers south-southwest of Ilovaisk an abandoned firing position with several misfired 122mm Grad 9M22S rockets equipped with the 9N510 incendiary warhead that contains 180 hexagonal incendiary capsules, which burn for two minutes.¹⁶ During Human Rights Watch’s August mission to Luhanskoe, residents reported that something that looked like fireworks fell on their village on the night of July 25-26 and left remnants that were hard to extinguish. Several homes burned, although they could not determine if the fires were due to the “fireworks” or Grad rockets launched at the same time. Human Rights Watch researchers found pieces of hexagonal capsules from the incendiary weapons at both sites. Human Rights Watch has not determined who launched the attacks in either Ilovaisk or Luhanskoe.

While the attacks in Ilovaisk and Luhanskoe did not involve white phosphorus, that weapon has played a role in the recent conflict in Ukraine in two ways. First, a rebel-affiliated team clearing unexploded ordnance reported destroying white phosphorus rounds in the course of its work cleaning up an area that had been a battlefield.¹⁷ Human Rights Watch has not

¹⁵ UN Commission of Inquiry on Syria, 7th Report of the UN Commission of Inquiry on Syria, Annex VI, para. 22.

¹⁶ Yuri Lyamin and Michael Smallwood, “9M22S Incendiary Rocket Components Documented in Eastern Ukraine,” post to “The Hoplite” (blog), Armament Research Services, October 14, 2014, <http://www.armamentresearch.com/9m22s-incendiary-rocket-components-documented-in-eastern-ukraine/> (accessed October 14, 2014). The sheer size of the misfired rockets (three meters in length and weighing 66 kilograms), and the fact that they bore clear signs of having been misfired, make it highly unlikely that the pro-Russian rebel forces or anyone else had planted them there.

¹⁷ Alec Luhn, “The Sappers of Stepanivka,” video report, September 18, 2014, <https://www.youtube.com/watch?v=YHxCp-bgQ9g> (accessed November 5, 2014).

corroborated this report, but it illustrates the potential danger attached to white phosphorus not only at the time of attack, but also afterwards if the rounds fail to function as designed.

Second, the Kremlin-controlled and pro-Kremlin media presented inaccurate evidence to ground accusations that Ukrainian forces used white phosphorus munitions. The incident reflected not only the Kremlin's determination to discredit the Ukrainian government at all costs, but also recognition that many countries consider use of white phosphorus weapon worthy of condemnation. On June 11, 2014, LifeNews (a private pro-Kremlin Russian news outlet) reported that pro-Russian insurgents claimed a village near the then-separatist stronghold of Slovyansk had been attacked with white phosphorus weapons.¹⁸ The LifeNews story included footage of a descending luminous substance. On June 12, Russia's Permanent Representative to the United Nations expressed outrage at the alleged use of white phosphorus, which he described as a "prohibited" and "forbidden" weapon.¹⁹ Ukraine denied using the weapon, and Human Rights Watch arms experts later concluded that the footage in this particular attack did not depict white phosphorus or any other type of incendiary weapon.²⁰ Even though the allegations proved unfounded, the fact that Russia used them as grounds for criticizing Ukraine shows that white phosphorus is increasingly viewed as unacceptable at the international level. The negative reaction to white phosphorus bolsters the case that the time is ripe to strengthen existing law so that white phosphorus falls under the definition of incendiary weapons and is adequately controlled.

Gaza

Israel's extensive use of white phosphorus in Gaza in 2009 provoked international and domestic outrage. Israel appears to have responded to this pressure by amending its policy and practice, a change reflected most notably by the lack of any confirmed reports of the use of white phosphorus munitions by Israeli forces during their military operations in Gaza in 2014. This development seems to reflect evolving attitudes to incendiary weapons and those with white phosphorus in particular.

From December 27, 2008 to January 18, 2009, during Operation Cast Lead, the Israel Defense Forces (IDF) fired approximately 200 ground-launched white phosphorus munitions into

¹⁸ Sara Malm and Will Stewart, "Russians Claim Ukraine Town Hit with Banned White Phosphorus Fire Starter Bombs," *The Daily Mail*, June 13, 2014, <http://www.dailymail.co.uk/news/article-2657220/Russians-claim-Ukraine-town-hit-banned-white-phosphorus-fire-starter-bombs.html> (accessed September 19, 2014). Ukrainian forces re-took control of Slovyansk in July.

¹⁹ "Russian Envoy to UN Calls Attention to Reports Claiming White Phosphorus Use in Ukraine," *Voice of Russia*, June 13, 2014, http://voiceofrussia.com/news/2014_06_13/Russian-envoy-to-UN-calls-attention-to-reports-claiming-white-phosphorus-use-in-Ukraine-5429/ (accessed September 19, 2014).

²⁰ Human Rights Watch dispatch, "White Phosphorus, White Lies, or What?," June 20, 2014, <http://www.hrw.org/news/2014/06/20/dispatches-white-phosphorus-white-lies-or-what>.

populated areas of Gaza.²¹ The IDF relied particularly on 155mm M825E1 artillery projectiles, which send burning phosphorus wedges 125 meters in all directions, giving them a broad area effect.²² The Israel Ministry of Foreign Affairs stated that the IDF used the shells only to create smokescreens.²³ Whatever their ostensible purpose, however, these shells caused significant harm to civilians; Human Rights Watch found dozens of civilian casualties in the six incidents it documented.²⁴ The white phosphorus shells also damaged civilian structures, including a school, a market, a humanitarian aid warehouse, and a hospital.²⁵

The IDF's actions in 2009, including its use of white phosphorus, drew international condemnation. For example, a UN Board of Inquiry established by Secretary-General Ban Ki-Moon found that the IDF had taken "clearly inadequate" precautions when it fired projectiles containing white phosphorus into UN compounds in Gaza, including a field office and school of the UN Relief and Works Agency (UNRWA). A summary of the board's findings stated, "[T]he firing by the IDF of artillery with high explosives and projectiles containing white phosphorus into, over or in such close proximity to UNRWA headquarters as to cause injuries to persons and very substantial damage to property was grossly negligent and amounted to recklessness."²⁶

In addition, the Report of the United Nations Fact-Finding Mission on the Gaza Conflict (the Goldstone Report) specifically mentioned and condemned the IDF's use of white phosphorus in civilian areas.²⁷ In describing the attacks on al-Quds Hospital, the report stated, "Taking into account the weapons used, and in particular the use of white phosphorus in and around a hospital ... the Mission finds ... the Israeli armed forces in these circumstances violated article

²¹ Amos Harel, "IDF Probes Improper Use of White Phosphorus Shells in Gaza," *Haaretz*, January 21, 2009, <http://www.haaretz.com/print-edition/news/idf-probes-improper-use-of-phosphorus-shells-in-gaza-strip-1.268545> (accessed November 5, 2014).

²² *Ibid.*

²³ See, e.g., Israel Ministry of Foreign Affairs, "The Operation in Gaza: Factual and Legal Aspects," July 2009, http://www.mfa.gov.il/MFA_Graphics/MFA%20Gallery/Documents/GazaOperation%20w%20Links.pdf (accessed on November 5, 2014), p.129; James Hider and Sheera Frenkel, "Israel Admits Using White Phosphorus in Attacks on Gaza," *The Times* (UK), January 24, 2009, <http://www.thetimes.co.uk/tto/news/world/middleeast/article2604353.ece> (accessed November 5, 2014).

²⁴ Human Rights Watch, *Rain of Fire: Israel's Unlawful Use of White Phosphorus in Gaza*, March 2009, <http://www.hrw.org/en/reports/2009/03/25/rain-fire>, p. 7.

²⁵ *Ibid.*, p. 1.

²⁶ Summary by the Secretary-General of the Report of the United Nations Headquarters Board of Inquiry into Certain Incidents in the Gaza Strip between 27 December 2008 and 19 January 2009, A/63/855 and S/2009/250, May 15, 2009, unispal.un.org/UNISPAL.NSF/o/3800655E522591FD852575CBoo4CA773 (accessed November 4, 2014), para. 56.

²⁷ United Nations Office of the High Commissioner for Human Rights, Report on the United Nations Fact-Finding Mission on the Gaza Conflict, A/HRC/12/48, September 25, 2009, paras. 629, 648, and 649.

18 of the Fourth Geneva Convention and violated customary international law in relation to proportionality.”²⁸

The widespread use of white phosphorus in Gaza generated domestic as well as international criticism. In May 2011, lawyers Michael Sfard and Emily Schaeffer filed, on behalf of 117 petitioners, a petition to Israel’s High Court of Justice that called for the IDF to cease its use of white phosphorus in civilian areas. The court dismissed the petition in July 2013, but the case was in many ways a victory for the petitioners. The dismissal came after the Israeli military claimed that it would no longer use white phosphorus in populated areas except in two narrow situations that it revealed only to the justices.²⁹ In the court’s ruling, Justice Edna Arbel explained that the conditions would “render use of white phosphorous an extreme exception in highly particular circumstances.”³⁰ Although this pledge to the court did not represent an official change in policy, Justice Arbel called on the IDF to conduct a “thorough and comprehensive examination” and adopt a permanent military directive.³¹ The court’s ruling also specified that judicial review of the military’s selection of means of warfare is allowed “when there are allegations that military measures have been used in a manner that contravenes the laws of war.”³²

The extensive outrage at its use of white phosphorus also apparently led the IDF to amend its official policy regarding the munitions in 2013. In a new policy announced shortly before the High Court ruling was published, the IDF insisted that “use of munitions containing white phosphorus for screening purposes is lawful under international law,” and stated that such use “may be expected in future military operations as the need arises.”³³ Nevertheless, the IDF said that it was developing new smoke shells without white phosphorus. It reserved the right to use and stockpile its white phosphorus munitions until it had sufficient numbers of alternatives, but explained that “[d]epending on the outcome of this development process, the

²⁸ Ibid., para. 629. Article 18 of the Fourth Geneva Convention requires parties to a conflict to respect hospitals. Geneva Convention relative to the Protection of Civilian Persons in Time of War, adopted August 12, 1949, 75 U.N.T.S. 287, entered into force October 21, 1950, art. 18.

²⁹ B’Tselem, “HCJ Dismisses Petition Demanding the Military Cease Use of White Phosphorous,” July 14, 2013, http://www.btselem.org/firearms/20130717_white_phosphorous_ruling (accessed September 23, 2014).

³⁰ Ibid.

³¹ Ibid.

³² Ibid.

³³ IDF Website, “IDF Clarifies Policy Regarding White Phosphorus,” May 2, 2013, <http://www.idf.il/1283-18901-en/Dover.aspx> (accessed October 8, 2014). A 2012 article by an IDF intelligence officer that is posted on the IDF website, however, suggests attitudes toward white phosphorus may change in the long run. Capt. Lior A. wrote, “Even though existing laws allow usage of phosphorus under certain conditions, it is going through a process that makes it into an illegitimate weapon. In [Israel’s] case, the mere fact that a weapon contains white phosphorus disqualifies the ammunition, and it does not matter at all what the purpose of the ammunition is.” Capt. Lior A. (intelligence officer), “The De-legitimization of Phosphorus Ammunition,” *Maarachot*, no. 445, October 2012, <http://maarachat.idf.il/PDF/FILES/9/113139.pdf> (accessed October 14, 2014), p. 41 (translated from Hebrew).

new shells are intended to gradually replace the current smoke shells as the primary means employed by the IDF for screening purposes.”³⁴ The amended policy represented a positive step toward reducing the harm caused by white phosphorus munitions, even though it did not go as far as the IDF’s pledge to the High Court.

The cumulative impact of international and domestic pressure was most evident in Israel’s apparent decision not to use white phosphorus during its military offensive in Gaza in July and August 2014. The offensive caused “unprecedented” damage in Gaza, according to the UN Office for the Coordination of Humanitarian Affairs (OCHA).³⁵ There were, however, no confirmed cases of IDF use of white phosphorus in the 2014 operations, in contrast to those of 2009.³⁶ During the 2014 hostilities, Israeli artillery chief Brigadier-General Roy Riftin said, “Smokescreens based on white phosphorus were certainly not used [in Gaza]. We enforced this in an extreme fashion.”³⁷ Respected attorney Michael Sfard, who had filed the 2011 High Court petition, also said there was no evidence of white phosphorus use.³⁸

Israel’s change in practice demonstrates the impact that can flow from the stigmatization of a particular type of weapon, although the recent attacks using incendiary weapons in both Syria and Ukraine show that much more still needs to be done to end the harm these weapons cause.

III. CCW Protocol III on Incendiary Weapons

The ongoing use of incendiary weapons, as well as more than three decades of experience, show that CCW Protocol III has failed to live up to its promise of protecting civilians from the effects of incendiary weapons.³⁹ States parties adopted Protocol III “in order to assure complete protection of civilians from incendiary weapons.”⁴⁰ The protocol is weakened, however, by loopholes and inconsistent restrictions.⁴¹ While growing stigmatization has

³⁴ IDF Website, “IDF Clarifies Policy Regarding White Phosphorus,” <http://www.idf.il/1283-18901-en/Dover.aspx>.

³⁵ UN OCHA described “[t]he scale of damage [in Gaza] resulting from the 50-day escalation in hostilities [beginning in July 2014 as] ... unprecedented since the beginning of the Israeli occupation in 1967.” Mission of UN Office for the Coordination of Humanitarian Affairs (OCHA), “Occupied Palestinian Territory: Gaza Emergency, Situation Report (as of 4 September 2014, 08:00 hrs),” http://www.ochaopt.org/documents/ocha_opt_sitrep_04_09_2014.pdf (accessed October 6, 2014).

³⁶ Yonah Jeremy Bob, “Sfard: IDF Did Not Use White Phosphorous during War Following Int’l Pressure,” *Jerusalem Post*, September 29, 2014, <http://www.jpost.com/Arab-Israeli-Conflict/NGO-IDF-did-not-use-white-phosphorous-in-Operation-Protective-Edge-376545> (accessed October 6, 2014).

³⁷ Dan Williams, “Israel Says No White Phosphorus Fired in Gaza this Time,” *Reuters*, August 12, 2014, <http://www.reuters.com/article/2014/08/12/us-mideast-gaza-artillery-idUSKBN0GC1DK20140812> (accessed October 8, 2014).

³⁸ Yonah Jeremy Bob, “Sfard: IDF Did Not Use White Phosphorous,” *Jerusalem Post*.

³⁹ Human Rights Watch and IHRC, “The Human Suffering Caused by Incendiary Munitions.”

⁴⁰ Letter from Valentin Zellweger, Director for International Law, Swiss Federal Department of Foreign Affairs, to Human Rights Watch, March 22, 2011.

⁴¹ For more information, see Human Rights Watch and IHRC, “The Need to Re-Visit Protocol III on Incendiary Weapons: Memorandum to Convention on Conventional Weapons Delegates,” November 2010, <http://www.hrw.org/en/news/2010/11/22/memorandum-ccw-delegates>.

changed state behavior in some cases, alone it is insufficient to address the humanitarian problem of incendiary weapons. In particular, countries need to broaden and strengthen Protocol III in order to bind states parties to a stricter law and put greater pressure on states not party to the convention.

Modifying Protocol III in two ways would greatly enhance its efficacy. First, states should amend the instrument to include an effects-based definition of incendiary weapons, so that all munitions with incendiary effects, including white phosphorus, are covered by the protocol's restrictions. Second, while a complete ban would be most effective, the current restrictions should at least be more consistent and comprehensive to reduce the suffering caused by these weapons.

As written, Protocol III defines an incendiary weapon as a munition "primarily designed" to set fire to objects or to cause burn injuries to persons.⁴² This narrow definition fails to encompass certain incendiary munitions, such as artillery shells containing white phosphorus, that cause cruel injuries and indiscriminate harm to civilians comparable to those caused by incendiary weapons already covered by the definition. To increase the humanitarian impact of Protocol III, states parties should therefore amend the instrument to define an incendiary weapon in terms of its *effects*, rather than in terms of the purpose for which the munition was *primarily designed*.

States parties to Protocol III should also advance humanitarian protection by strengthening the restrictions on the use of incendiary weapons. As written, Article 2 of Protocol III bans use of air-dropped incendiary weapons only in "a concentration of civilians."⁴³ It imposes even weaker regulations on the use of surface-launched incendiary weapons. In a convoluted provision regarding surface-launched weapons, the protocol prohibits an attack on a military objective within a concentration of civilians except when the objective is separated from that concentration of civilians and all feasible precautions are taken to minimize effects on civilians.⁴⁴ These rules are arbitrarily inconsistent and have proved inadequate to prevent the devastating effects of incendiary weapons.

⁴² CCW Protocol III 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, art. 1(1) ("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.").

⁴³ *Ibid.*, art. 2(2) ("It is prohibited in all circumstances to make any military objective located within a concentration of civilians the object of attack by air-delivered incendiary weapons.").

⁴⁴ *Ibid.*, art. 2(3) ("It is further prohibited to make any military objective located within a concentration of civilians the object of attack by means of incendiary weapons other than air-delivered incendiary weapons, except when such military objective is clearly separated from the concentration of civilians and all feasible precautions are taken with a view to limiting the incendiary effects to the military objective and to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects.").

An outright prohibition on the use of incendiary weapons would offer the strongest protections for civilians and soldiers alike. If it is impossible to achieve consensus on an absolute ban at this point, however, states should at least amend the protocol to apply the same restriction to all incendiary weapons, including surface-launched models. In other words, the protocol should prohibit the use of any incendiary weapons in concentrations of civilians. This small but significant change would more effectively protect civilians while increasing the clarity of the protocol.

IV. States Positions

The use of incendiary weapons and the need to review Protocol III have attracted international attention for the past four years. Since 2011, approximately 25 countries have made statements at the CCW or have written letters expressing a willingness to take up the matter of incendiary weapons, and representatives of other states have articulated similar positions in private conversations.⁴⁵

Language on incendiary weapons has also been included in the final reports of the CCW's annual meeting for three consecutive years. The final document from the Fourth Review Conference in 2011 stated:

The Conference notes the concerns raised during the discussions on Protocol III by some High Contracting Parties about the offensive use of white phosphorous against civilians, including suggestions for further discussion on this matter.⁴⁶

Likewise, the final report of the 2012 Meeting of States Parties stated that:

concerns had been raised by some High Contracting Parties under Protocol III about the offensive use of white phosphorous against civilians, including suggestions for further discussion on this matter.⁴⁷

⁴⁵ Human Rights Watch sent letters to each of the then 114 CCW states parties attaching a November 2010 memorandum to CCW delegates: Human Rights Watch and IHRC, "The Need to Re-Visit Protocol III on Incendiary Weapons." Ten states responded. Human Rights Watch sent a second set of letters to CCW states parties on March 28, 2012, and 11 states responded. Others made comments during CCW meetings.

⁴⁶ CCW Fourth Review Conference Final Document (Part II), CCW/CONF.IV/4/Add.1, Geneva, November 14-25, 2011, <http://daccess-dds.ny.un.org/doc/UNDOC/GEN/G11/652/03/PDF/G1165203.pdf?OpenElement> (accessed October 28, 2014), p. 9.

⁴⁷ CCW Meeting of the High Contracting Parties, Final Report, CCW/MSP/2012/9, Geneva, November 15-16, 2012, <http://daccess-dds.ny.un.org/doc/UNDOC/GEN/G12/638/30/PDF/G1263830.pdf?OpenElement> (accessed October 28, 2014), p. 4.

Responding to reports of use in Syria, the 2013 final report stated:

The Meeting noted the concerns raised by a number of High Contracting Parties over the allegations of use of incendiary weapons against civilians.⁴⁸

The reports reflect concern at the use of incendiary weapons, including white phosphorus, and the willingness of some CCW states to hold discussions on the topic.

At least a dozen countries and the International Committee of the Red Cross (ICRC) referred to incendiary weapons in their statements at the November 2013 CCW Meeting of States Parties. Most of the countries that spoke on incendiary weapons focused their remarks on recent use in Syria, yet some also addressed the possibility of revisiting the language of Protocol III. In addition, several countries called for increased compliance and universalization of Protocol III. The ICRC reminded CCW states that it “has echoed the calls of Human Rights Watch and repeatedly urged States Parties to examine the humanitarian impact of white phosphorous munitions and the possible legal and policy approaches that may be posed by these weapons.”⁴⁹

Condemnations of the Use of Incendiary Weapons

In November 2013, at least 12 states criticized the use of incendiary weapons in Syria: Austria, Canada, Croatia, Ecuador, France, Germany, Ireland, Lithuania, the Netherlands, Norway, Switzerland, and the United States. The Netherlands, for example, “condemn[ed] the use of incendiary weapons by the Syrian regime.”⁵⁰ Germany said it was “deeply concerned about the alleged use of incendiary weapons” in Syria.⁵¹ Many of these states highlighted the use of incendiary weapons on civilian populations. France declared that the “use of incendiary weapons against civilians in Syria is ... unacceptable” and “condemn[ed it] with the utmost firmness.”⁵² Likewise, in response to “disturbing reports that incendiary weapons may have been used against civilians in Syria,” the United States “strongly condemn[ed] any intentional

⁴⁸ CCW Meeting of the High Contracting Parties, Final Report, CCW/MSP/2013/10, Geneva, November 14-15, 2013, <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G13/646/33/PDF/G1364633.pdf?OpenElement> (accessed October 28, 2014), p. 3.

⁴⁹ Statement of the International Committee of the Red Cross, Convention on Conventional Weapons (CCW) Meeting of High Contracting Parties, Geneva, November 14, 2013, [http://www.unog.ch/80256EDD006B8954/\(httpAssets\)/B16B653E13D12B26C1257CE5004E5A90/\\$file/ICRC_MSP+2013_statements.pdf](http://www.unog.ch/80256EDD006B8954/(httpAssets)/B16B653E13D12B26C1257CE5004E5A90/$file/ICRC_MSP+2013_statements.pdf) (accessed November 5, 2014), p. 2.

⁵⁰ Statement of the Netherlands, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁵¹ Statement of Germany, CCW Meeting of High Contracting Parties. Geneva, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁵² Statement of France, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013, http://www.reachingcriticalwill.org/images/documents/statements/14Nov_France.pdf (accessed November 5, 2014).

targeting of civilians.”⁵³ Such statements illustrate the growing stigma against use of incendiary weapons.

In their 2013 statements, states criticized incendiary weapons from both a humanitarian and a legal perspective. Norway, for example, called the impact of incendiary weapons “horrific,” highlighting the devastating humanitarian consequences of incendiary weapon use.⁵⁴ Other states, such as Canada, Ecuador, and the Netherlands, condemned the attacks or the weapons themselves as “indiscriminate,” and thus in violation of fundamental legal tenets of international humanitarian law. Lithuania specifically emphasized the effects of the weapons, calling for Syria to cease using weapons such as incendiary weapons that have an “indiscriminate impact.”⁵⁵

Two countries also condemned the use of incendiary weapons at the UN General Assembly’s First Committee on Disarmament and International Security in October 2014. France stated that it “condemns the use of incendiary and cluster weapons in Syria and calls upon this country to accede to relevant humanitarian disarmament conventions.”⁵⁶ Russia said that it “has repeatedly expressed its serious concern in connection with the use by Kiev of weapons with indiscriminate and extremely injurious effect to civilian population.” It included incendiary weapons among a long list of such weapons.⁵⁷ As was discussed earlier, Human Rights Watch has documented use of incendiary weapons in Ukraine but has not been able to determine responsibility for their use.

Calls for Strengthening or Revisiting Protocol III

As in previous years, the need to revisit Protocol III was another theme of the statements at the 2013 CCW Meeting of States Parties. In its intervention, Croatia “encourage[d] all State Parties to further explore the issue of incendiary weapons within the scope of CCW” with the goal of

⁵³ Statement of the United States, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013, <http://geneva.usmission.gov/2013/11/15/u-s-opening-statement-at-the-meeting-of-parties-to-the-ccw/> (accessed November 5, 2014).

⁵⁴ Statement of Norway, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁵⁵ Statement of Lithuania, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁵⁶ Statement of Ambassador Jean-Hugues Simon-Michel of France, First Committee of the UN General Assembly, New York, October 22, 2014, http://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com14/statements/22Oct_France.pdf (accessed November 5, 2014).

⁵⁷ Statement of Vladimir Ermakov, Deputy Director of the Department for Nonproliferation and Arms Control of the Ministry of Foreign Affairs of Russia, First Committee of the UN General Assembly, New York, October 23, 2014, http://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com14/statements/23Oct_Russia.pdf (accessed November 5, 2014).

“strengthening and universalizing of Protocol III.”⁵⁸ Austria expressed interest in further discussion relating to the sufficiency of current regulations and stated that “we believe it is important to continue these discussions” in relation to “calls [by some states and civil society] ... to take a closer look at Protocol III on incendiary weapons and its implementation in light of current challenges.”⁵⁹ Norway implied that it saw room for strengthening the protocol’s definition of incendiary weapons. It explained that it is important to “focus on the actual effects and not the weapon’s design or intended effect.”⁶⁰

Both Croatia’s interest in strengthening Protocol III and Austria’s openness to continuing discussion rest in part on the belief that the CCW should be treated as a dynamic instrument in the face of changing warfare. Austria explained that “we need to stay responsive to new findings and developments regarding conventional weapons which may be deemed excessively injurious or to have indiscriminate effects.”⁶¹ Likewise, Croatia said that “our community should ensure that CCW will continue to demonstrate its relevance as a key instrument of international humanitarian law.”⁶²

Calls for Universalization and Compliance

A number of states, including two in 2013, have called for improved compliance with Protocol III. In its 2013 statement, Austria stressed the importance of working toward the “full and effective implementation of the Convention and its Protocol.”⁶³ Likewise, Norway “remain[ed] concerned with the implementation of Protocol III,” and noted that the “added value of the Convention on Conventional Weapons may be determined by how its obligations are implemented.”⁶⁴

States have also urged more countries to join Protocol III.⁶⁵ In 2013, Canada, Croatia, Germany, and the United States all made such pleas. For example, Canada “call[ed] on Syria to accede to

⁵⁸ Statement of Croatia, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013, http://www.reachingcriticalwill.org/images/documents/statements/14Nov_Croatia.pdf (accessed November 5, 2014).

⁵⁹ Statement of Austria, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/MSP-2013/Statements/14Nov_Austria.pdf (accessed November 5, 2014).

⁶⁰ Statement of Norway, CCW Meeting of High Contracting Parties, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁶¹ Statement of Austria, CCW Meeting of High Contracting Parties, November 14, 2013, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/MSP-2013/Statements/14Nov_Austria.pdf.

⁶² Statement of Croatia, CCW Meeting of High Contracting Parties, November 14, 2013, http://www.reachingcriticalwill.org/images/documents/statements/14Nov_Croatia.pdf.

⁶³ Statement of Austria, CCW Meeting of High Contracting Parties, November 14, 2013, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/MSP-2013/Statements/14Nov_Austria.pdf.

⁶⁴ Statement of Norway, CCW Meeting of High Contracting Parties, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁶⁵ As of November 5, 2014, there were 118 states parties to the CCW and 109 states parties to Protocol III. Iraq joined in 2014. United Nations Office at Geneva, “States Parties and Signatories,”

the Convention on Conventional Weapons and its Protocol III on incendiary weapons.”⁶⁶ Germany said that states parties “must step up our efforts to promote universalization of Protocol III.”⁶⁷ The United States claimed that the reports of continuing use of incendiary weapons against civilians in Syria “underscore that universalization is critical to the success of CCW and its protocols” and called “on all States not yet party to the CCW to join the ... States that are already party to it, and to accede to the CCW and its protocols.”⁶⁸ These calls for improved compliance and universalization show that even among states that do not explicitly support amending Protocol III, there is recognition that Protocol III has the potential to be an important instrument.

Conclusion

Incendiary weapons have produced severe and unacceptable human suffering, most recently in Syria and Ukraine. Stronger law is needed to decrease or prohibit the use of incendiary weapons, including those with white phosphorus, and reduce the associated civilian harm.

Human Rights Watch and IHRC urge countries at the 2014 CCW Meeting of States Parties to condemn the latest use of incendiary weapons and express their willingness to revisit Protocol III. We also call on the meeting as a whole to include language on incendiary weapons in its final report, as has been done in the last three final reports. States should ultimately approve mandates to discuss and then to negotiate amendments to Protocol III. These steps are essential to minimizing the suffering from such indiscriminate and exceptionally cruel weapons.

[http://www.unog.ch/80256EE600585943/\(httpPages\)/3CE7CFCoAA4A7548C12571C00039CB0C?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/3CE7CFCoAA4A7548C12571C00039CB0C?OpenDocument) (accessed November 5, 2014). Of the states involved in the conflicts discussed above, Russia and Ukraine are parties to both CCW and Protocol III, Israel is a party to CCW but not to Protocol III, and Syria is party neither to the convention nor its protocols.

⁶⁶ Statement of Canada, CCW Meeting of High Contracting Parties, Geneva, November 14, 2013 (notes by Human Rights Watch and IHRC).

⁶⁷ Statement of Germany, CCW Meeting of High Contracting Parties, November 14, 2014 (notes by Human Rights Watch and IHRC).

⁶⁸ Statement of the United States, CCW Meeting of High Contracting Parties, November 14, 2013, <http://geneva.usmission.gov/2013/11/15/u-s-opening-statement-at-the-meeting-of-parties-to-the-ccw/>.