

White Phosphorus Munition Use in Contemporary Conflicts: A Brief Analysis Within the Context of International Law

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Summary

The paper discusses the use of white phosphorus (WP) munitions in recent conflict zones such as Ukraine, Gaza, and Nagorno-Karabakh, highlighting the significant legal, ethical, and humanitarian issues it raises. It argues for critically reassessing white phosphorus use in warfare to ensure it aligns with humanitarian values and public ethics. To mitigate the concerns surrounding WP munitions, the paper proposes a few measures, including tightening international laws governing the use of incendiary weapons, improving mechanisms for monitoring and verifying WP usage, and bolstering global efforts to educate and advocate for the curtailment or prohibition of the incendiary munitions. These recommendations aim to enhance compliance with international humanitarian standards and protect human rights in conflict zones.

White phosphorus (WP) in modern conflicts has ignited significant ethical and legal debates globally. Notably, its use in Ukraine, Gaza, Lebanon, and Nagorno-Karabakh have underscored the complex interplay between military tactics and international legal standards, particularly concerning humanitarian law and the conduct of war. White phosphorus, which combusts upon contact with oxygen to produce intense heat, light, and smoke, serves multiple military functions, including smoke screening, illuminating targets, and marking.¹ Despite these applications, its deployment as an incendiary weapon to target military personnel or equipment has drawn scrutiny due to the potential for indiscriminate harm and lasting damage, particularly in the civilian context.

The discourse around white phosphorus in conflict zones reflects broader concerns over the ethics of warfare, the protection of civilians, and the need for comprehensive adherence to international legal standards. Despite not being classified as a chemical weapon under the Chemical Weapons Convention (CWC) due to its action as an incendiary rather than through chemical interaction with biological processes, the nature of white phosphorus has prompted calls for tighter regulation under international humanitarian law. The critical legal frameworks pertinent to white phosphorus are the 1980 Convention on Certain Conventional Weapons (CCCW) and its Protocol III, alongside the 1949 Geneva Conventions. Protocol III explicitly restricts the employment of incendiary devices, including white phosphorus, in civilian settings, though its military use remains permissible under specific conditions.²

The legality of white phosphorus as an anti-personnel weapon is debated in relation to

the laws of warfare and CCCW. While some argue that its use in civilian areas constitutes a clear legal violation, others note that non-incendiary applications remain within the bounds of legality. As such, understanding and addressing the implications of white phosphorus munitions in contemporary conflicts is crucial for advancing the principles of humanitarian law and ensuring the responsible conduct of hostilities.

Russia-Ukraine war

The use of white phosphorus munitions in the conflict in Eastern Ukraine, particularly by Russian forces, has sparked considerable controversy and debate, raising serious questions about adherence to international legal standards, specifically Protocol III of CCCW. Several reports emerged of Russian forces employing white phosphorus bombs during the Battle of Kyiv and against Kramatorsk in March 2022.³ These allegations were significant because white phosphorus causes severe burns and is capable of igniting structures, posing a grave threat to civilians and combatants alike. The use in densely populated urban environments like Kyiv and Kramatorsk drew criticism from international observers and human rights organizations, who raised concerns about potential violations of the CCCW, which explicitly restricts the use of incendiary weapons against or near civilian populations due to their indiscriminate nature.

Again, in May 2022, another notable instance was reported at the Azovstal steel plant in Mariupol.⁴ The use of white phosphorus in this heavily industrial area, which had become a focal point of the conflict, was particularly alarming due to the risk of causing widespread fires and civilian casualties. The dense urban setting of Mariupol and the presence of civilians in the vicinity of the steel plant underscored the potential violation of international

humanitarian law principles, which mandate the protection of civilians during armed conflicts. After seven months, in December 2022, the conflict in Marinka further exemplified the ongoing controversy surrounding white phosphorus. Reports of white phosphorus resurfaced, highlighting a continued pattern in the conflict. Over time, such repeated use in different locations suggested a systematic employment of such munitions, intensifying the legal and ethical implications under the framework of international humanitarian law. In May 2023, the Ukrainian Defence Ministry accused Russia of attacking the besieged city of Bakhmut with phosphorus munitions. The attack on Bakhmut, a city enduring prolonged siege conditions, again raised the spectre of indiscriminate harm to both combatants and civilians, spotlighting the ongoing humanitarian crisis in the region.⁵

In each of the above instances, the use of white phosphorus munitions by Russian forces against both military targets and civilian areas demonstrated a troubling trend: disregard for the principles of distinction and proportionality, which are cornerstones of international humanitarian law.⁶ The incidents in Kyiv, Kramatorsk, Mariupol, Marinka, and Bakhmut exemplified potential breaches of Protocol III of the CCCW. They highlighted the broader issue of compliance with international norms in modern warfare. These events have necessitated a robust international response, emphasizing the need for thorough investigations, accountability for violations of international law, and renewed discussions on the ethical and legal frameworks governing the use of incendiary weapons in armed conflicts.

Israel and Palestine conflict

The use of white phosphorus in Gaza by Israeli forces, particularly during the 2008-

2009 conflict, has been widely documented and criticized. Israel also admitted using munitions containing white phosphorus during its offensive.⁷ The densely populated nature of Gaza and the resultant civilian injuries highlighted concerns about the indiscriminate effects of these weapons. In Gaza, Israel's use of white phosphorus in military operations puts civilians at risk of severe and long-term injuries, violating international humanitarian law.

Following the Hamas terror attack on 7 October 2023 in Southern Israel, which resulted in casualties, Israel launched retaliatory strikes targeting Hamas in Gaza and Hezbollah in Lebanon. In a specific operation in southern Lebanon, Israel is reported to have used US-supplied white phosphorus munitions, according to a *Washington Post* investigation. This attack, which occurred in the village of Dheira near the Israeli border—a location previously utilized by Hezbollah for launching attacks against Israel—resulted in at least nine civilian injuries and the destruction of four homes.⁸

The Israel Defense Forces have denied using white phosphorus shells to target civilians or ignite fires. They claim that the shells were used to create smokescreens for operational purposes and that their use adheres to international law standards, even exceeding them. However, this incident has drawn international criticism, with the United States launching an investigation into whether the deployment of white phosphorus in Lebanon constitutes a misuse of US-supplied arms by Israel, explicitly concerning the targeting of civilians. The State Department's inquiry aims to assess compliance with the conditions under which such military aid and munitions are provided, reflecting the complex interplay of military tactics, international law, and diplomatic relations in conflict zones.⁹

Nagorno-Karabakh conflict

The conflict in the Nagorno-Karabakh region has also seen allegations of the use of white phosphorus. The mountainous terrain and the involvement of civilian settlements in the conflict zone present a complex scenario for applying international humanitarian law. Between September and November 2020, Azerbaijani forces utilized white phosphorus ammunition along with other weapon systems against Armenian military personnel on the Nagorno-Karabakh front. In Nagorno-Karabakh (or self-claimed Republic of Artsakh), Armenia accused Azerbaijan of using white phosphorus bombs during the conflict, an accusation that Baku denied.¹⁰ Multiple incidents were recorded of white phosphorus ammunition use, underscoring the environmental and potential humanitarian impact. For instance, a late October 2020 strike targeting a forested civilian area near the Martuni region led to significant fires and ecological damage.¹¹

In November 2020, Azerbaijan also levelled accusations and initiated legal actions concerning Armenia's use of white phosphorus munitions multiple times between 8 October and 8 November. These munitions were reportedly deployed in Azerbaijani territories, including the Terter region and near civilian populations. The attacks aimed to cause environmental damage and civilian casualties, particularly in Fizuli and Terter and near the city of Shusha.¹²

The use of white phosphorus is restricted under international humanitarian law, and its indiscriminate use in populated areas without distinguishing between civilians and military objectives is prohibited and constitutes a war crime. According to a *Human Rights Watch* report, white phosphorus munitions were used in at least seven armed conflict zones between 2000

and 2016 in Afghanistan, Ukraine, Somalia, Iraq, Gaza and Lebanon. Besides the discussed conflict zones, which recently witnessed the use of white phosphorous, the conflict in Yemen had witnessed the alleged use of white phosphorus by Saudi Arabia-led coalition forces in 2016. The dense civilian population and the catastrophic humanitarian situation in Yemen exacerbated the implications of such use under international humanitarian law. Like in the Lebanon case, in Yemen too, Saudi Arabia was suspected to have used US-supplied white phosphorus munitions.

Conclusion and Recommendations

The use of white phosphorus munitions in recent conflicts, as discussed here, raises legal, ethical, and humanitarian concerns. Such weapons violate international standards and cause severe, lasting harm to people and the environment. The narrative surrounding these munitions serves as a stark reminder of their destructive impact on human life and the environment, highlighting the urgent need for compliance with international humanitarian principles. The critical examination of the use of white phosphorus emphasizes the necessity for a comprehensive re-evaluation that aligns with these principles, stressing the need to reduce their deployment in warfare.

It is important to address the complexities and challenges posed by the use of white phosphorus munitions in conflict zones. The following strategic recommendations are proposed to try to lessen the humanitarian impact of white phosphorus munitions, safeguard human rights, and reinforce the foundations of international humanitarian law.

International Regulations

Implement more transparent and rigorous guidelines and enforcement protocols for

regulating incendiary weapons. This includes revising existing international treaties (e.g. CWC or CCCW) or developing new frameworks to close loopholes that permit the use of white phosphorus under certain conditions, ensuring stricter compliance with international humanitarian laws.

Verification and Reporting

Develop and implement comprehensive mechanisms for accurately verifying and reporting the usage of white phosphorus during conflict. This should include the creation of independent international bodies equipped with the necessary authority and resources to investigate allegations of misuse, thereby facilitating accountability and transparency in conflict zones.

Awareness and Advocacy

Intensify efforts to educate the global community about the dire humanitarian consequences of white phosphorus munitions. This includes launching awareness campaigns and advocacy initiatives (e.g. through CWC Coalition, a civil society conglomerate within OPCW) aimed at policymakers and the general public to foster a collective understanding of the need for restrictions or a complete ban on such weapons. Engaging in diplomatic dialogue and leveraging international forums could also amplify the call for action, encouraging states to commit to the ethical conduct of warfare.

Endnotes:

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- ³ “Ukraine chemical attack fears rise after Kramatorsk hit by phosphorus bombs”, *The Times*, 23 March 2022 at <https://www.thetimes.co.uk/article/ukraine-chemical-attack-fears-rise-kramatorsk-hit-phosphorus-bombs-9n3nqd2hm>. (Accessed on January 30, 2024.)
 - ⁴ “Burning munitions cascade down on Ukrainian steel plant, video shows”, *Reuters*, 16 May 2022 at <https://www.reuters.com/world/europe/burning-munitions-cascade-down-ukrainian-steel-plant-video-2022-05-15/> (Accessed on January 30, 2024.)
 - ⁵ “Ukraine war: Russia accused of using phosphorus bombs in Bakhmut,” *BBC*, 06 May 2023 at <https://www.bbc.com/news/world-europe-65506993#> ((Accessed on January 30, 2024.)
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 - ⁷ “Israel acknowledges use of white-phosphorus shells”, *France24*, 8 February 2009 at <https://www.france24.com/en/20090802-israel-acknowledges-use-white-phosphorus-shells-gaza-civilians> (Accessed on February 03, 2024.)
 - ⁸ “Israel used U.S.-supplied white phosphorus in Lebanon attack”, *The Washington Post*, 11 December 2023 at <https://www.washingtonpost.com/investigations/2023/12/11/israel-us-white-phosphorus-lebanon/>(Accessed on February 03, 2024.)
 - ⁹ “US Probes Israeli Strikes That Killed Civilians in Gaza, Possible Use of White Phosphorus in Lebanon”, *The Wall Street Journal*, 14 February 2024 at <https://www.wsj.com/world/middle-east/u-s-probes-israeli-strikes-that-killed-civilians-in-gaza-possible-use-of-white-phosphorus-in-lebanon-b8fbo43b#> (Accessed on February 04, 2024)
 - ¹⁰ “Nagorno-Karabakh: Armenia accuses Azerbaijan of using phosphorus bombs”, *France24*, 19 November 2020 at [https://www.france24.com/en/europe/20201119-nagorno-karabakh-ceasefire-armenia-](https://www.france24.com/en/europe/20201119-nagorno-karabakh-ceasefire-armenia-accuses-azerbaijan-of-using-phosphorus-bombs)
 - ¹¹ “Azerbaijan Used Phosphorus Bomb in Martuni During Artsakh War, Investigation Confirms”, *Asbarez*, 9 December 2022 at <https://asbarez.com/azerbaijan-used-phosphorus-bomb-in-martuni-during-artsakh-war-investigation-confirms/> (Accessed on February 15, 2024)
 - ¹² “Lawsuit on the fact of the use of white phosphorus by Armenians in Karabakh Politics”, *Turan*, 20 November 2020 at <https://www.turan.az/ext/news/2020/11/free/politics%20news/en/130104.htm>. (Accessed on February 15, 2024)