

# MANUFACTURER RESPONSIBILITY FOR END USE VIOLATIONS OF DOMESTIC AND INTERNATIONAL LAWS: U.S.-MADE WHITE PHOSPHORUS IN GAZA

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## I. INTRODUCTION

'My daughter told me there was a car on fire with people in it. I looked out and saw a young man who had lost control of himself trying to push his way into the burning car. When I got to the car he had fallen down and he was on fire. The shelling was ongoing and I dragged him to an alley and tried to talk to him, but he couldn't talk. One of his eyes had burned away and he was horribly injured.'

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According to [Muhammad] al-Sharif, he and the man were stuck in the alley for 90 minutes as the shelling continued, and because they feared Israeli snipers in the area. Once the shelling subsided, he and two young men carried the wounded man to a neighbor's car and then drove him to al-Shifa hospital. At 2:30 p.m. al-Sharif returned to the car and found that it had partially melted and the gas tank had exploded.

Around that time, Fathi Sabbah also arrived at the car, where he met a neighbor and an ambulance that had come to take the dead bodies away for burial. In the smoking wreckage, he said, they found only a few bones of the four occupants. A piece of a skull and some teeth lay next to the vehicle, al-Sharif said.<sup>1</sup>

On January 15, 2009, Mohammad al-Haddad and four other family members entered their 1996 Volkswagon Golf after Israel announced a temporary unilateral ceasefire in the Gaza Strip.<sup>2</sup> Trusting that no attacks would take place, the family started to drive away, but less than 100 meters later their car was hit.<sup>3</sup> Mohammad flew from the car, and the above stated events took place after he ran back to the car to attempt to save his family.<sup>4</sup> Mohammad's mother Ihsan, his father 'Uday, his twenty-four year-old brother Hatim, and his fourteen year-old sister Ala'a all died in the attack.<sup>5</sup>

The events above are graphic and tragic, not to mention difficult to stomach, but unfortunately, death and destruction are nothing new to the residents of the Gaza Strip of the Palestinian Territories. War and turmoil have been all too familiar in the region as the conflict between the Palestinians and Israelis has continued for over sixty years now, ever since the formation of the State of Israel in 1948. What *is* new, however, is the use of white phosphorus as a weapon by the Israeli Defense Forces ("IDF") in the Gaza Strip. What is even more significant is the fact that this white phosphorus was made in the United States.<sup>6</sup>

Israel has the strongest army in the Middle East and one of the strongest in the world. No army gains its strength on its own, though. Like most other nations who develop and maintain armies, Israel manufactures some of its own weapons and imports a great deal of others. War makes money. Military trade is big — maybe even now more than ever — and Israel is no

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1. HUMAN RIGHTS WATCH, RAIN OF FIRE: ISRAEL'S UNLAWFUL USE OF WHITE PHOSPHORUS IN GAZA 36–37 (2009), <http://www.hrw.org/sites/default/files/reports/lio0309web.pdf> (footnote omitted).

2. *Id.* at 37.

3. *Id.* at 37.

4. *Id.* at 37.

5. *Id.* at 37.

6. *Id.*

exception.<sup>7</sup> Given the significant impact of this realm of trade among nations, numerous national and international laws exist that govern these business dealings. International conventions, such as the Chemical Weapons Convention, and domestic laws, such as the U.S. Arms Export Control Act in the United States, all contain regulations and restrictions on what can be sold, who it can be sold to, and what procedures must be followed in order for the dealings of countries, companies, or nations to be legal.

This Paper is a response to Human Rights Watch's request that the United States "[i]nvestigate whether Israel used U.S.-manufactured white phosphorus in Gaza in violation of international humanitarian law or any arms transfer agreements or policies."<sup>8</sup> It will begin by outlining various international laws and addressing the debate of whether white phosphorus use is permitted under such laws. This Paper then intends to compile evidence from various reliable sources that white phosphorus manufactured by U.S. companies was indeed used by the IDF. Following this groundwork, this Paper will delve into an assessment of whether the manner in which white phosphorus was used violated international humanitarian law as well as U.S. domestic law. More specifically, this assessment addresses the question of whether the sale and export of American made white phosphorus to a buyer whose use went against U.S. policies violated the Arms Export Control Act or other relevant laws.

As a disclaimer, this Paper does not intend to ignore the Israeli injuries resulting from Palestinian Qassam rockets. The taking of innocent lives on either side is unacceptable. However, this Paper is focusing on the legality of white phosphorus use in warfare and whether a manufacturing or exporting country can be held liable for the use of its weaponry when the use violates international or domestic law. Given that Israel was the only party to this conflict to have been found using white phosphorus, its actions will be the focus of this Paper.

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7. Khaled Diab, *Profits of War*, GUARDIAN NEWS & MEDIA, Jan. 11, 2009, <http://www.guardian.co.uk/commentisfree/2009/jan/11/gaza-israel-palestine-military-equipment>.

According to the Israel Export and International Co-operation Institute, security and homeland security exports reached \$3bn in 2005. In 2007, Israel overtook Britain to become the world's exporter, selling a total of \$4bn in arms. On top of that, since the bursting of the dot-com bubble, Israel has boosted its military spending, partly to help salvage high-tech firms. Last year, proved to be yet another record year, with the country's defence budget subsuming a massive 16% of government spending and 7% of GDP. Add to that, the average \$3bn in military aid which Israel receives from the United States each year, and you have a truly staggering economic dependence on the way of the gun.

*Id.*

8. HUMAN RIGHTS WATCH, *supra* note 1, at 10.

## II. GAZA'S EVENTS AND INTERNATIONAL LAW

### A. Operation Cast Lead

On December 27, 2008, Israel began what became a twenty-two day operation by the name of Operation Cast Lead.<sup>9</sup> One of the purposes of this Operation, as portrayed in the media, was “to enforce a ceasefire agreement with Hamas on Tel Aviv’s terms.”<sup>10</sup> Media sources initially reported that the attack was in response to an initial violation of the ceasefire a few days before the Operation began, but only a few days later, the media corrected itself after it realized that Israel had been planning the Operation for months.<sup>11</sup> Defense Minister Ehud Barak ordered the IDF to prepare for the attack more than six months before the actual Operation was put into effect.<sup>12</sup> U.S. sources came to realize the validity of this fact when Rick Sanchez decided to have the international desk at CNN fact check statements made by an independent politician, Mustafa Barghouti, just the day before on CNN.<sup>13</sup> Mr. Barghouti had stated that Israel broke the ceasefire, not the Palestinians.<sup>14</sup> Quoting U.S. News and World Report and the Guardian, among other sources, Mr. Sanchez confirmed that Mr. Barghouti’s comments were indeed correct and that Israel broke the ceasefire.

After six months of careful planning and strategizing, the Israeli Cabinet finally put the Operation to a vote and on December 24, 2008, unanimously agreed that the attacks should take place.<sup>15</sup> Within seventy-two hours, the attacks were underway.<sup>16</sup> For three full weeks, Israel attacked Palestinians in the Gaza strip, the first week strictly with air strikes, but the second and third weeks included ground incursions. At the end of three weeks, Palestinian homes were destroyed, schools and hospitals burned, and most importantly, over 1,300 Palestinians killed, at least 300 of them children,

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9. *Id.* at 1.

10. The Nuke Strategy Wonk, Israeli Operation Cast Lead is a “Thunder Run” Into Gaza, Jan. 13, 2009, <http://scisec.net/?p=107>.

11. Barak Ravid, *Operation “Cast Lead”: Israeli Air Force Strike Followed Months of Planning*, GLOBAL RES., Dec. 28, 2009, <http://www.globalresearch.ca/index.php?context=va&aid=11521>.

12. *Id.*

13. See e.g., Henry Siegman, *Israel’s Lies*, 31 LONDON REV. BOOKS 3 (2009), <http://www.lrb.co.uk/v31/n02/henry-siegman/israels-lies>; YouTube, *CNN Confirms Israel Broke Ceasefire First*, <http://www.youtube.com/watch?v=KntmpoRFX4> (last visited Feb. 5, 2010) [hereinafter *Breaking Ceasefire*].

14. *Breaking Ceasefire*, *supra* note 13.

15. Ravid, *supra* note 11.

16. See HUMAN RIGHTS WATCH, *supra* note 1, at 1.

and 5,000 others injured.<sup>17</sup> On the Israeli side, Palestinian Qassam rockets killed seven Israeli civilians in southern Israel near Sderot.<sup>18</sup>

After the attacks ended, human rights groups and reporters were finally let into Gaza, as they were prevented from doing so while the fighting was underway.<sup>19</sup> There, they observed the destruction first hand. After numerous discussions with locals, investigators with these groups were repeatedly told about how the IDF used a chemical incendiary that resulted in a number of casualties. Surviving Palestinians showed their chemical burns and the remnants of the chemical still burning in the streets of Gaza up to two weeks after the conflict ended.<sup>20</sup> Doctors discussed burning wounds that they could not stop from burning until the flesh was destroyed — a chemical that soon was identified as white phosphorus.

### B. White Phosphorus Use

White phosphorus has a number of uses within the military realm. As Human Rights Watch (“HRW”) explained:

White phosphorus is a chemical substance dispersed in artillery shells, bombs, rockets, or mortars, used primarily to obscure military operations on the ground. When released upon ground contact or air-burst, it emits a dense white smoke that militaries use to screen the movement of troops. The smoke also interferes with infra-red optics and weapon-tracking systems, thus protecting military forces from guided weapons such as anti-tank guided missiles.<sup>21</sup>

Therefore, it is not unusual to find white phosphorus manufactured in a number of places across the globe. It is accepted as a chemical used within warfare in a select number of ways. Also known as “Willy Pete,” white phosphorus is namely used for screening, signaling, or incendiary purposes.<sup>22</sup>

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17. AMNESTY INTERNATIONAL, FUELING CONFLICT: FOREIGN ARMS SUPPLIES TO ISRAEL/GAZA 5 (2009) [http://www.amnestyusa.org/countries/israel\\_and\\_occupied\\_territories/fuellingconflict.pdf](http://www.amnestyusa.org/countries/israel_and_occupied_territories/fuellingconflict.pdf).

18. *Id.* at 17 (“The military publication Jane’s Terrorism and Security Monitor has described the ‘Qassam’ rockets as: ‘inaccurate, short-range and rarely lethal.’”).

19. *See generally*, HUMAN RIGHTS WATCH, *supra* note 1; AMNESTY INTERNATIONAL, *supra* note 17.

20. *See generally*, HUMAN RIGHTS WATCH, *supra* note 1; AMNESTY INTERNATIONAL, *supra* note 17.

21. HUMAN RIGHTS WATCH, *supra* note 1, at 2.

22. GlobalSecurity.org, White Phosphorus, <http://www.globalsecurity.org/military/systems/munitions/wp.htm> (last visited Jan. 26, 2010).

Israel has repeatedly used white phosphorus in its military attacks. The IDF used white phosphorus in Lebanon in 1982, 1993, and 2006.<sup>23</sup> Israel used two specific types of white phosphorus shells in Gaza in this latest attack.<sup>24</sup> One type was the 155mm artillery shell, most notably recognized by its light green canister casing with the label of “WP Canister.”<sup>25</sup> This shell is comprised of four metal liners that together, contain 116 felt wedges that have been soaked in white phosphorus.<sup>26</sup> Once the shell explodes, the felt wedges scatter in the air, the exposure to oxygen causing these wedges to immediately ignite and burn.<sup>27</sup> The second type of shell is the 120mm mortar shell.<sup>28</sup>

There are two ways to use such white phosphorus bombs.<sup>29</sup> One is to explode the bombs upon impact with the ground, and the second is to airburst the bomb while it is still flying in the air.<sup>30</sup> The first provides the military with a limited area of a thick smokescreen, while the latter ignites in the air, covering a larger area.<sup>31</sup> Given the nature of the second use of a phosphorus bomb, anything on the ground, including homes and civilians, is in danger of exposure to the phosphorus chips and hence in danger of catching fire.<sup>32</sup> In other words, although white phosphorus is intended to act as a smoke screen, imprecise use of white phosphorus can result in exposure and harm to humans. “When white phosphorus comes into contact with people or objects, it creates an intense and persistent burn, emitting heat and absorbing liquid. . . . [W]hite phosphorus can also penetrate the body and poison organs.”<sup>33</sup> If the person survives the burns, long-term effects include kidney failures and infections.<sup>34</sup> Israel used this second method.<sup>35</sup>

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23. HUMAN RIGHTS WATCH, *supra* note 1, at 12; *see generally* Matthew Weaver, *White Phosphorus: Israel Fires Artillery Shells into Gaza*, GUARDIAN NEWS & MEDIA, Jan 3, 2009, <http://www.guardian.co.uk/world/2009/jan/03/gaza-israel-attacks-artillery>; *see also* Robert Marquand, *Gaza: Israel Under Fire for Alleged White Phosphorus Use*, CHRISTIAN SCI. MONITOR, Jan. 14, 2009, <http://csmonitor.com/2009/0114/p07s01-wome.htm?print=true>.

24. HUMAN RIGHTS WATCH, *supra* note 1, at 12.

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.*

29. Amira Hass, *Is Israel Using Illegal Weapons in Its Offensive on Gaza?*, HAARETZ, Jan. 16, 2009, <http://www.haaretz.com/hasen/spages/1055927.html>.

30. *Id.*

31. *Id.*

32. *Id.*

33. HUMAN RIGHTS WATCH, *supra* note 1, at 11.

34. *Id.* at 11 (citing *Identification of Explosive White Phosphorus Injury and Its Treatment*, signed by Dr. Gil Hirshom, Head of the Trauma Unit, Headquarters of the Chief Military Medical Officer, Ref. Cast Lead SH9 01293409).

35. *See e.g.*, HUMAN RIGHTS WATCH, *supra* note 1; AMNESTY INTERNATIONAL, *supra* note 17; Hass, *supra* note 29.

Additionally, Israel used white phosphorus in three different situations. First, the IDF used white phosphorus in densely populated areas,<sup>36</sup> air-bursting the chemical over civilian shelters such as homes and apartment buildings, as well as directly striking al-Quds Hospital, the main United Nations Relief and Works Agency for Palestine Refugees in the Near East (“UNRWA”) compound where 700 civilians were taking shelter, and the U.N. Beit Lahiya school.<sup>37</sup> A number of people were killed, many more injured, and over \$3.7 million worth of medical supplies were destroyed.<sup>38</sup> The second manner in which IDF soldiers used white phosphorus was as an obscurant on the edge of residential neighborhoods, “substantial amounts of white phosphorus land[ing] up to a few hundred meters inside residential areas, killing at least six civilian[s] and wounding dozens.”<sup>39</sup> Finally, white phosphorus was used along the 1948 armistice line, “perhaps to screen troop movements,” to eliminate hiding areas for Palestinians, and to detonate landmines.<sup>40</sup>

### III. WHITE PHOSPHORUS USE UNDER INTERNATIONAL LAW

#### A. Relevant International Treaties and Conventions

The U.N. Charter states that its members “shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.”<sup>41</sup> As much as the world would hope that all states could handle their disputes by peaceful means, the reality is that states go to war and people are killed. However, regardless of the necessity of war, states must still follow laws of war that help to minimize injustices and civilian casualties. Of particular relevance here are restrictions placed on the types of weapons used in war and the manner in which they can be used.

With regard to white phosphorus, this chemical is not specifically named as a prohibited chemical in any international laws or conventions. However, a number of international agreements govern how a country uses weapons, and these agreements are essential to the assessment of the legality of the manner in which Israel used white phosphorus in Gaza. Namely, they are the First Additional Protocol of 1977 to the 1949 Geneva Conventions (“Protocol I”), the 1907 Hague Protocol III of the Convention on Certain Conventional Weapons, and the 1907 Hague Regulations.<sup>42</sup> Although generally a state must have ratified a treaty in order for it to be

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36. Hass, *supra* note 29.  
37. HUMAN RIGHTS WATCH, *supra* note 1, at 3–4.  
38. *Id.* at 3–4.  
39. *Id.* at 4.  
40. *Id.* at 4.  
41. U.N. Charter art. 2, para. 4.  
42. HUMAN RIGHTS WATCH, *supra* note 1, at 60.

binding on that party, HRW suggests that the relevant provisions in the above mentioned treaties are customary international law.<sup>43</sup> It appears that their position is indeed valid, as numerous international and domestic organizations as well as courts recognize that “the principles of distinction and proportionality and the prohibition on causing superfluous injury or unnecessary suffering” are all considered to be part of customary international law as is the prohibition on chemical and biological weapons.<sup>44</sup> Therefore, regardless of whether a state has ratified the above-mentioned treaties, it is bound by those rules of law when in an armed conflict. The only question is whether white phosphorus falls under these customary international laws, and if not, if there are any treaties or laws that would otherwise bind the involved countries.

1. *Protocol Additional to the Geneva Conventions of August 12, 1949*

In 1977, the United Nations adopted its first protocol to the Geneva Conventions relating to the protection of victims of international armed conflicts.<sup>45</sup> Article 51 sections 4 and 5 of the Protocol titled “Protection of the civilian population” prohibit indiscriminate attacks, which are:

4. . . . (a) [T]hose which are not directed at a specific military objective; (b) those which employ a method or means of combat which cannot be directed at a specific military objective; or (c) those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol; and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.

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43. *Id.* at 60.

44. International Conferences of the Red Cross and the Red Crescent, *Use of Nuclear, Biological or Chemical Weapons: Current International Law and Policy Statements*, Mar. 3, 2003, available at <http://www.icrc.org/Web/Eng/siteeng0.nsf/html/5KSK7Q>; see also *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, I.C.J. Reports 1996, p. 226, at 257–58 (“The Nuremberg International Military Tribunal had already found in 1945 that the humanitarian rules included in the Regulations annexed to the Hague Convention IV of 1907 ‘were recognized by all civilized nations and were regarded as being declaratory of the laws and customs of war’ (Trial of the Major War Criminals, 14 November 1945–1 October 1946, Nuremberg, 1947, Vol. 1, p. 254)”; Commander’s Handbook on the Law of Naval Operations NWP 9 (Rev. A), FMFM 1–10, Oct. 1989, Ch. 10, available at [http://www.history.navy.mil/library/online/nwp9\\_commanderhand.htm](http://www.history.navy.mil/library/online/nwp9_commanderhand.htm) (stating the U.S. position that “[b]oth customary and conventional international law prohibits the “first use” of lethal chemical weapons in armed conflict”).

45. Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, Dec. 7, 1978, 1125 U.N.T.S. 3 [hereinafter Protocol I].

5. Among others, the following types of attacks are to be considered as indiscriminate: (a) an attack by bombardment by any methods or means which treats as a single military objective a number of clearly separated and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians or civilian objects; and (b) an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.<sup>46</sup>

In other words, Part 4 says if an attack is not aimed at a specific military target, if the method used cannot specify its targets, if the technique used affects much more than the original intended target, or if the method used was expected to injure both military and civilians alike, then that attack is held as indiscriminate. Part 5(b) provides the principle of proportionality — the idea that a military's actions and objectives must be proportional to the resulting damage from the operation. Almost every alternative definition mentioned in this provision encompasses the events that took place in Gaza; therefore, the attacks on Gaza were in fact indiscriminate.

Before moving forward, it must be restated that Gaza is one of the most densely populated areas in the world. Therefore, even targeting a specific man in a building will result in the deaths of many others when the method is an air strike rather than an individual sniper taking out the individual insurgent. Given the limited space in Gaza, numerous Palestinian families live in each individual building. Additionally, white phosphorus use has two primary uses as mentioned previously. Israel chose the second smokescreen covering a much larger area.

That being said, we now turn to the definitions in Article 51. The first part looks at whether the attacks were aimed at a specific military objective. Israel takes the position that it was aiming to target Palestinian insurgents who were firing Qassam rockets into Israel. Assuming that this was indeed their military objective, the problem is that the means utilized by the IDF, which goes into Part (b) of the definition, could not specifically aim to fulfill that objective.

In addition, Part (c) of Article 51(4) states that methods that cannot narrowly aim at the target cannot be used and are considered indiscriminate. Here, human rights organizations turn to the IDF's specific decision to use white phosphorus rather than alternative, less harmful and equally effective means, such as 155mm smoke projectiles.<sup>47</sup> These projectiles have the same ability to create smokescreens but do not result in the same incendiary effect,<sup>48</sup> hence eliminating the potential for human suffering. They suggest that this shows Israel was not concerned with making sure the attacks were

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46. *Id.*

47. HUMAN RIGHTS WATCH, *supra* note 1, at 4.

48. *Id.*

as narrowly drawn as could be, causing as few unnecessary casualties as possible. Although Israel could argue that is why it employed the use of new precision-guided tank shells, which use GPS coordinates, this leads to yet another fulfillment of Article 51(4)(c) — namely that the weapon “strike[s] military objectives and civilians or civilian objects without distinction.”<sup>49</sup>

The IDF did not properly take into consideration the endangering of civilian life in its attacks in violation of international law. The problem with white phosphorus is that as much as one tries to target a specific location or individual, if the target is in a densely populated area like Gaza, can civilian and military objects really be distinguished as Article 51(4)(c) requires? HRW suggests that there is a chance the two can in fact be distinguished, but that despite this, Israel went ahead and targeted areas that it knew contained civilians — a weighty accusation.

Human Rights Watch (HRW) military analysts say Israel’s precision-guided tank shells are so accurate that they can be fired into a window from a distance of a mile (1.5 km). Given the numerous reports during OCL of tank shells being fired directly into Palestinian homes, Amnesty International and HRW suspect that IDF soldiers routinely targeted any home or building where signs of movement were detected by their tank’s vision system. Such a blanket open fire policy could be illegal under international law.<sup>50</sup>

Additionally, at the UNRWA compound that was hit, five senior employees repeatedly contacted the IDF at Erez and Tel Aviv, begging them to stop the shelling.<sup>51</sup> UNRWA staff, including director John Ging, “had given the IDF the GPS coordinates of all [U.N.] installations in Gaza before Operation Cast Lead began.”<sup>52</sup> UNRWA Gaza Field Administration Officer Scott Anderson was among the employees asking the IDF to stop.<sup>53</sup> Anderson, a retired U.S. Army Officer, said that he knew “in the [U.S.] Army, it would not take that long to get the artillery fire to stop.”<sup>54</sup> One can only conclude based on the above mentioned facts, that the IDF did not differentiate between civilians and military targets — that it even specifically chose to ignore warnings by international organizations that the IDF was about to hit premises clear of military and full of civilians. Such actions cannot be labeled anything but indiscriminate and hence a violation

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49. Protocol I, *supra* note 45.

50. *The Israeli Arsenal Deployed Against Gaza During Operation Cast Lead*, J. PALESTINE STUD., Spring 2009, at 175, 181.

51. HUMAN RIGHTS WATCH, *supra* note 1, at 45.

52. *Id.* at 45.

53. *Id.* at 45.

54. *Id.* at 43, 45.

of the First Protocol to the Geneva Convention. This shows that even if white phosphorus use is legal, the way in which it was used was illegal.

## 2. 1907 Hague Regulations

The Hague Convention Respecting the Laws and Customs of War on Land was adopted with the goal of refining the laws of war to limit war's negative impacts.<sup>55</sup> The Convention encompasses a wide range of topics, from prisoners of war to the recognition of relief societies. Chapter I of Section II, though, looks specifically at the “[m]eans of injuring the enemy, sieges, and bombardments.”<sup>56</sup> Within this Chapter is a section entitled “Special Prohibitions,” addressing actions such as treachery, killing those who have surrendered, and abuse of flags and uniform.<sup>57</sup> Most importantly is Part (e), which says that it is “especially forbidden” to “employ arms, projectiles, or material calculated to cause unnecessary suffering.”<sup>58</sup>

It is widely accepted that the effect of white phosphorus when coming in contact with human skin, can be deadly. Israel's own Ministry of Health put together a report, entitled “Exposure to White Phosphorus,” on the effect of white phosphorus as the attacks were underway and acknowledged “that burns on less than 10 percent of the body can be fatal because of damage to the liver, kidneys and heart.”<sup>59</sup> The Report continues, stating that whether a person comes into physical contact with the white phosphorus, or if the person inhales or swallows it, the result is a “systemic poisoning” that can lead to death.<sup>60</sup>

Part (e) forbids the use of materials that are “calculated to cause unnecessary suffering.”<sup>61</sup> Did Israel intentionally use white phosphorus to cause harm to civilians? Was the suffering unnecessary? Determining whether Israel specifically used white phosphorus because it knew the effects it would have on civilians is a difficult task. Generally, the IDF repeatedly air-bursted white phosphorus over populated areas from 155mm artillery, and this in itself is enough to show that unnecessary suffering would result given the densely populated area. However, human rights organizations focused on a specific incident within Operation Cast Lead that they felt shows Israel knew the effect of white phosphorus and intentionally

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55. Laws and Customs of War on Land, Oct. 18, 1907, 36 Stat. 2277 [hereinafter Hague Convention IV]. The introduction to the Convention states that it is “important . . . to revise the general laws and customs of war, either with a view to defining them with greater precision or to confining them within such limits as would mitigate their severity as far as possible.” *Id.*

56. *Id.* § 2301.

57. *Id.* § 2302.

58. *Id.*

59. HUMAN RIGHTS WATCH, *supra* note 1, at 1, 11; AMNESTY INTERNATIONAL, *supra* note 17, at 10.

60. HUMAN RIGHTS WATCH, *supra* note 1, at 11–12.

61. Hague Convention IV, *supra* note 55, at 61.

used it. This incident is the attack on the UNRWA compound on January 15, 2009.<sup>62</sup> UNRWA stated that its officials repeatedly spoke with IDF officers the morning of the attack on the UNWRA compound, asking them to stop the firing because the attacks were getting closer to the compound and civilians were sheltered there. Needless to say, the IDF continued their plan and hit the compound that afternoon.<sup>63</sup> Additionally, the United Nations provided the IDF with the GPS coordinates of all of its facilities in Gaza, including the school that it struck, wounding twelve and killing two young brothers.<sup>64</sup> After noting that all GPS coordinates had been relayed to the IDF, UNRWA spokesman Christopher Gunness said, "When you have a direct hit into the third floor of a U.N. school, there has to be an investigation to see if a war crime has been committed."<sup>65</sup>

Was the suffering unnecessary? Was this the only method the IDF could employ to carry out its mission? The reality is that Israel itself manufactured a much less harmful alternative smokescreen that does not burn anything and everything it encounters, as white phosphorus does. However, Israel intentionally chose to launch white phosphorus upon Gazan targets, including the school area and the U.N. compound. Israel was clearly on notice that it was targeting buildings or areas with or near a significant amount of civilians, using a material that undoubtedly caused unnecessary suffering. Therefore, there is a strong case that Israel did indeed commit a war crime under the Hague Convention by its intentional use of white phosphorus in Operation Cast Lead.

### 3. *1907 Hague Protocol III of the Convention on Certain Conventional Weapons*

The Convention on Certain Conventional Weapons ("CCW"), short for the 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, also focuses on protecting civilians in addition to military personnel, and Protocol III specifically addresses and prohibits the use of incendiary weapons.<sup>66</sup> The Protocol defines an incendiary weapons as one that is "primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat or a combination thereof, produced by a chemical reaction of a substance delivered on the target."<sup>67</sup> Determining whether a weapon is considered to

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62. HUMAN RIGHTS WATCH, *supra* note 1, at 41.

63. *Id.* at 3.

64. *Id.* at 4, 48.

65. *Id.* at 48.

66. Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons [Protocol III to the CCW], Oct. 10, 1980, 1342 U.N.T.S. 171, 19 I.L.M. 1534, *entered into force* Dec. 2, 1983.

67. *Id.*

be an incendiary weapon therefore, turns to its purpose and effect — the two go hand in hand.

Israel acceded to the CCW but has not ratified Protocol III.<sup>68</sup> As a non-signatory to the Protocol, Israel does not have a treaty obligation and hence technically can use incendiary weapons. However, Israel's actions are still covered by international law, and Israel can be held accountable for violating other principles of international law. But even more so, yet another question arises — whether that provision of the Convention can be considered a customary norm or a principle of international law, hence binding Israel regardless of its status with the CCW.

The crux of the argument turns to an assessment of whether white phosphorus is an incendiary weapon, one that is “primarily designed to set fire to objects or to cause burn injury to persons through the action of flame,” or if instead it is strictly to light the sky for the IDF soldiers, the effects of burning humans being purely accidental, and what many may call, collateral damage. Even if a weapon is not designed to burn victims but this is a necessary and consistent effect of its use, does the weapon fall under the CCW? The spokesman for the Organisation for the Prohibition of Chemical Weapons (“OPCW”), an organization that polices the Chemical Weapons Convention, said with certainty that the CCW covers white phosphorus.<sup>69</sup> This is a logical conclusion given the documented effects of white phosphorus on humans, as discussed previously in Section II(B). Israel is likely to argue that the primary purpose is to light the sky and nothing more. However, given both the physical effects of the weapon, the inability to limit the scope of its impact, and the fact that people like the spokesman for the OPCW support such a conclusion, white phosphorus is an incendiary weapon. Israel's strongest argument is that it has not ratified Protocol III and is hence not bound. Logistically speaking, this is a valid defense. The only way Israel can be indirectly liable for violating the provisions under this Convention is if the use of incendiary weapons is prohibited under international law.

Unlike Israel, the United States ratified the CCW on March 24, 1995,<sup>70</sup> and only one day after President Barack Obama was sworn in as President, the United States ratified Protocol III of the CCW on January 21, 2009.<sup>71</sup> However, the Convention only governs white phosphorus use and not its sale. The United States did not use white phosphorus in this conflict and only sold it to Israel. Therefore, both Israel and the United States are not

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68. *CCW Protocol III Party States*, Wikimedia Commons, [http://commons.wikimedia.org/wiki/File:CCW\\_Protocol\\_III\\_Party\\_States.PNG](http://commons.wikimedia.org/wiki/File:CCW_Protocol_III_Party_States.PNG).

69. David Charter, Michael Evans & Richard Beeston, *Phosphorus Was Used for Fallujah Bombs, U.S. Admits*, TIMES ONLINE, Nov. 17, 2005, <http://www.timesonline.co.uk/tol/news/world/iraq/article591095.ece>.

70. Press Release, Office of the Spokesman, U.S. Dep't of State, U.S. Joins Four Laws of War Treaties (Jan. 23, 2009) (on file with author).

71. *Id.*

liable under the CCW. Nevertheless, this recent ratification of Protocol III signifies a shift in the United States' position towards such weapons. This could foretell not only a change in the U.S. position towards incendiary weapons *use*, but also their *manufacture and export* — perhaps even a narrowing of U.S. arms export laws and controls.

#### 4. 1993 Chemical Weapons Convention

The Chemical Weapons Convention was formulated to prevent states from maintaining chemical weapons in their arsenals.<sup>72</sup> Implementation and compliance with the Convention is overseen by the Organization for the Prohibition of Chemical Weapons (“OPCW”), an organization headquartered at the Hague that was formed specifically under the CWC to “conduct verification activities as provided by the Convention” and to “organize consultations and co-operation among the Member States.”<sup>73</sup> Currently there are 188 state parties that have signed and ratified the Convention, including the United States and Israel.<sup>74</sup>

Under Article I(1)(a), state parties to the CWC undertake to “never under any circumstances . . . develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone.”<sup>75</sup> Furthermore, the Convention defines what it considers to be “toxic chemicals,” namely chemicals “which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals.”<sup>76</sup> Put simply, state parties cannot make, produce, or keep weapons that harm or kill humans or animals given their chemical nature.

This leads to the important question of whether white phosphorus is considered a chemical weapon under the Convention. There is yet to be issued a clear-cut answer to this for two reasons. First, the focus of the Convention is ensuring compliance (verification) rather than addressing

72. THE NEW CHEMICAL WEAPONS CONVENTION: IMPLEMENTATION AND PROSPECTS 2 (Professor M. Bothe, et al., eds. 1998) [hereinafter IMPLEMENTATION AND PROSPECTS].

73. *Id.* at 5.

74. Organisation for the Prohibition of Chemical Weapons, OPCW Member States, [http://www.opcw.org/nc/about-opcw/member-states/?tx\\_opcwmemberstate\\_pi1%5BsortField%5D=0&tx\\_opcwmemberstate\\_pi1%5BsortReverse%5D=0&tx\\_opcwmemberstate\\_pi1%5Bpointer%5D=1](http://www.opcw.org/nc/about-opcw/member-states/?tx_opcwmemberstate_pi1%5BsortField%5D=0&tx_opcwmemberstate_pi1%5BsortReverse%5D=0&tx_opcwmemberstate_pi1%5Bpointer%5D=1) (last visited Feb. 2, 2010).

75. Organisation for the Prohibition of Chemical Weapons, Article I. General Obligations, <http://www.opcw.org/chemical-weapons-convention/articles/article-i-general-obligations/> (last visited Feb. 2, 2010).

76. Organisation for the Prohibition of Chemical Weapons, Article II. Definition and Criteria, <http://www.opcw.org/chemical-weapons-convention/articles/article-ii-definitions-and-criteria/> (last visited Feb. 2, 2010); *see also* Andrew Buncombe & Solomon Hughes, *The Fog of War: White Phosphorus, Fallujah, and Some Burning Questions*, THE INDEP. WORLD, Nov. 15, 2005, <http://www.independent.co.uk/news/world/americas/the-fog-of-war-white-phosphorus-fallujah-and-some-burning-questions-515345.html>.

conflicts or issues that arise the step before that, such as whether a chemical can be categorized as a chemical weapon despite not being on the existing lists ('schedules')<sup>77</sup> of prohibited chemicals.<sup>78</sup> The lists are not exhaustive because many chemicals have multiple purposes, many of which are legal, and an outright ban would thus be inappropriate.<sup>79</sup> Secondly, the language in Article II is rather general, and scholars have gone so far as to say "the abstract logic" of the definition of 'chemical weapons' is "impeccable," noting that "the concrete application will be very difficult."<sup>80</sup> It is the general and abstract nature of the definition of "chemical weapons" that leads to murky waters when categorizing white phosphorus. If issues are not resolved by the dispute settlement mechanism provided by the CWC, the Conference of States Parties and the Executive Council of the OPCW can each request an advisory opinion from the International Court of Justice.<sup>81</sup>

On one side of the debate is the argument that when used to create a smokescreen, white phosphorus ("WP") is not prohibited under the Convention. "According to the OPCW spokesman, the CWC prohibits the use of WP munitions where the toxic properties of WP are 'specifically intended to be used as a weapon.'"<sup>82</sup> A scholar identified the relevant question as "[w]hether the harmful effects of fire and smoke produced by WP munitions constitute 'chemical action on life processes' in the CWC's definition of a toxic chemical."<sup>83</sup> On the other side are proponents of the position that white phosphorus can indeed be considered a chemical weapon, depending on its specific use.

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77. Currently there are three schedules, Schedules 1–3, listing what the CWC currently considers 'toxic chemicals' and their precursors. Organisation for the Prohibition of Chemical Weapons, Schedules of Chemicals, <http://www.opcw.org/chemical-weapons-convention/annex-on-chemicals/b-schedules-of-chemicals/> (last visited Feb. 2, 2010).

78. IMPLEMENTATION AND PROSPECTS, *supra* note 72, at 4, 6. "[T]he question of the legal evaluation of the facts thus ascertained and measures to redress non-compliance are only regulated in a fragmentary manner. The assumption underlying this approach seems to be that the existence and use of the procedures for ascertaining facts will be sufficient . . . ." *Id.* at 6.

79. *Id.* at 4.

80. *Id.* at 3.

81. *Id.* at 5, 12. The Conference of States Parties is comprised of representatives from each of the countries that are parties to the Convention, and the Executive Council consists of "[forty-one] members being elected on the basis of equitable geographic distribution and other criteria, in particular the importance of the chemical industry of the country concerned." *Id.* at 5.

82. International Humanitarian Law Research Initiative, Program on Humanitarian Policy and Conflict Research, Harvard University, *IHL Primer #5 – White Phosphorus Munitions*, July 2009, <http://ihl.ihlresearch.org/index.cfm?fuseaction=page.viewpage&pageid=2105>.

83. *Id.*

Professor Paul Rogers, of the University of Bradford's department of peace studies, said white phosphorus could be considered a chemical weapon if deliberately aimed at civilians . . . . 'It is not counted under the chemical weapons convention in its normal use but, although it is a matter of legal niceties, it probably does fall into the category of chemical weapons if it is used for this kind of purpose directly against people.'<sup>84</sup>

This latter position seems to imply that there is an intent requirement — that there must be a showing of an intention to harm civilians with the use of white phosphorus. Proving such a thing might be rather difficult, but HRW and Amnesty International have both constructed their own theories on why, given the time of day, frequency, and nature of the phosphorus bombings, Israel intended to harm civilians, or at least to disregard the need for their safety.<sup>85</sup> Therefore, if the OPCW accepts that white phosphorus has harmful effects on life processes, then it must indeed be categorized as a chemical weapon.

Finally, the Convention addresses injured states by the inappropriate acts of another state party, but the question remains, what about non-parties, or even non-state actors such as the Occupied Palestinian Territories? A state party that is injured by acts that violate the Convention is permitted to "not comply with one or more of its obligations towards the said State" according to Article 11,<sup>86</sup> but non-state actors are left in the dark. They cannot sign the agreement since they are not states, and are hence left without certain safeguards. The only repercussions for a state's improper actions towards a non-state actor seem to be from the OPCW itself.

##### 5. *International Law Commission's Articles on Responsibility of States for Internationally Wrongful Acts*

The previous international legal documents all address the use of certain types of weapons in wars and the responsibilities states have towards civilians. The International Law Commission's Articles on Responsibility of States for Internationally Wrongful Acts differs slightly in the sense that this agreement discusses the responsibility a state other than the primary acting state has when aiding that primary state in illegal acts. The Articles would be relevant in holding accountable other states that aided Israel in its attacks on Gaza, should those acts be conclusively found to violate international law.

Article 16 says that:

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84. *US Used White Phosphorus in Iraq*, BBC NEWS, Nov. 16, 2005, <http://news.bbc.co.uk/2/hi/4440664.stm>.

85. See HUMAN RIGHTS WATCH, *supra* note 1; AMNESTY INTERNATIONAL, *supra* note 17.

86. IMPLEMENTATION AND PROSPECTS, *supra* note 72, at 452–53.

A State which aids or assists another State in the commission of an internationally wrongful act by the latter is internationally responsible for doing so if: (a) that State does so with knowledge of the circumstances of the internationally wrongful act; and (b) the act would be internationally wrongful if committed by the State.<sup>87</sup>

In other words, if the United States aided another country by providing it with the means to commit the wrongful act, and if the United States would be considered to have committed a wrongful act if it had engaged in the same conduct as that other state that it helped, then the United States is considered to be internationally responsible for the primary actor's conduct. Assuming that Israel's conduct was in fact internationally wrongful, based on the above-mentioned conventions and treaties, the question is whether the United States was aware that Israel's conduct was wrongful, and secondly if the United States engaged in the same conduct, whether it would also be considered to have engaged in a wrongful act.

This Paper takes the position that the United States was on notice of the illegality of the use of white phosphorus in such a manner given its past involvement with phosphorus in Iraq, hence fulfilling the two requirements of Article 16. Although not all incendiary weapons are chemical weapons, the use of either one is very controversial. That is why the United States, much like Israel in this more recent episode in Gaza, initially denied using white phosphorus in Fallujah, Iraq.<sup>88</sup> Then it said it used white phosphorus "very sparingly in Fallujah, for illumination purposes,"<sup>89</sup> and finally later admitted firing white phosphorus at the insurgency, used as an "incendiary weapon against enemy combatants."<sup>90</sup> While attacks were underway in Gaza, an IDF spokesman "told CNN: 'I can tell you with certainty that white phosphorus is absolutely not being used.'"<sup>91</sup> Only a week later, Israel started defending itself saying that it uses weapons only in manners that conform to the requirements of international law,<sup>92</sup> and once the attacks were complete, the IDF issued a statement admitted firing around 200 white

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87. AMNESTY INTERNATIONAL, *supra* note 17, at 21 (internal quotations omitted).

88. *UK Used White Phosphorus in Iraq*, BBC NEWS, Nov. 16, 2005, [http://news.bbc.co.uk/2/hi/uk\\_news/politics/4441822.stm](http://news.bbc.co.uk/2/hi/uk_news/politics/4441822.stm) ("The US State Department originally denied it had been used in last year's assault on Falluja, a stronghold for Sunni insurgents west of Baghdad.")

89. *Did the U.S. Use "Illegal" Weapons in Fallujah?*, U.S. Department of State, Jan. 27, 2005, available at <http://www.globalsecurity.org/military/library/report/2005/050127-fallujah.htm>.

90. *UK Used White Phosphorus in Iraq*, *supra* note 88 ("Pentagon spokesman Lt Col Barry Venable said the substance had been used as an 'incendiary weapon against enemy combatants'."); see also *US Used White Phosphorus in Iraq*, *supra* note 84.

91. Ben Wedeman, *Group Accuses Israel of Firing White Phosphorus into Gaza*, CNN.com, Jan. 12, 2009, <http://www.cnn.com/2009/WORLD/meast/01/12/white.phosphorus/index.html>.

92. *Id.*

phosphorus artillery shells in northern Gaza.<sup>93</sup> And much like Israel today, the United States defended itself by first saying that it had not signed any international treaty restricting white phosphorus use, and then by stating that white phosphorus is an incendiary weapon rather than a chemical weapon.<sup>94</sup> Therefore, it held that its use of white phosphorus was permissible.<sup>95</sup> In the end though, the international community was extremely critical of U.S. action in Fallujah, accusing the United States of using white phosphorus against humans rather than just for illumination purposes and as a smokescreen. Why were Israel and the United States avoiding admitting their use of white phosphorus if they truly felt the chemical and the manner in which it was used was legal? Their actions alone seem to imply something.

As the abovementioned conventions show, the permissible uses of incendiary weapons are very limited, and some treaties, such as the Convention on Certain Conventional Weapons, ban their use. After looking at the three international agreements collectively, it becomes clear that white phosphorus use is permissible in open areas.

[B]ut air-bursting white phosphorus over populated areas is unlawful because it places civilians at unnecessary risk and its wide dispersal of burning wedges may amount to an indiscriminate attack. White phosphorus can also be used as a weapon against hardened military targets, such as bunkers. However, it may not be used as an anti-personnel weapon when a weapon less likely to cause unnecessary suffering is available.<sup>96</sup>

Having established that the United States's use of white phosphorus in Fallujah was illegal under international law, that the United States's use was very similar to Israel's use in Gaza, and keeping in mind the permissible uses of white phosphorus, one can only conclude that Israel's use of white phosphorus was illegal under international law. Therefore, any state aiding Israel in these illegal actions (1) knowing the illegality of such actions and (2) potentially being liable if they had committed those acts themselves would be in violation of Article 16 of the International Law Commission's Articles on Responsibility of States for Internationally Wrongful Acts.

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93. *The Israeli Arsenal Deployed Against Gaza During Operation Cast Lead*, *supra* note 50, at 187.

94. *US Used White Phosphorus in Iraq*, *supra* note 84 (“[White phosphorus] was used as an incendiary weapon against enemy combatants,” spokesman Lt Col Barry Venable told the BBC . . .”).

95. At the time this statement was made, the United States was not a signatory to Protocol III of the CCW prohibiting the use of incendiary weapons. However, the United States signed it on January 21, 2009, and therefore, white phosphorus use by the United States would not be permissible.

96. HUMAN RIGHTS WATCH, *supra* note 1, at 2–3.

The United States fulfills both of these elements and hence is in violation of Article 16. First, the United States was well aware of the illegality of white phosphorus use in certain circumstances, primarily because of the fact that the United States itself used the chemical and faced international criticism after such a decision. Secondly, although not a signatory to Protocol III at the time, the United States was party to a number of relevant conventions and is currently a signatory to Protocol III. If the United States engaged in white phosphorus use in a densely populated area like Gaza, it too would be engaging in an internationally wrongful act under international law. Hence, the United States is responsible for aiding Israel in that it sold the weapons that made it possible to commit the acts in the first place.

### B. Conclusion Regarding International Law

Based on all the evidence compiled regarding IDF use of white phosphorus, human rights organizations are in agreement that Israel violated international humanitarian law. HRW concluded that the IDF “repeatedly exploded white phosphorus munitions in the air over populated areas, killing and injuring civilians, and damaging civilian structures.”<sup>97</sup> It found that Israel could have used other non-lethal alternatives, such as “smoke shells produced by an Israeli company,” if Israel’s use of the white phosphorus was in fact only as an obscurant.<sup>98</sup> HRW also pointed to IDF’s “more effective precision weapons designed to minimize collateral damage, such as the GBU-39, a 250-pound (113 kg) guided bomb.”<sup>99</sup> However, the IDF consistently and repeatedly air-bursting white phosphorus, “especially where no Israeli forces were on the ground,” which “strongly suggests that the IDF was not using the munition for its obscurant qualities, but rather for its incendiary effect.”<sup>100</sup> The use of white phosphorus, HRW continued, “violated international humanitarian law (the laws of war), which requires taking all feasible precautions to avoid civilian harm and prohibits indiscriminate attacks.”<sup>101</sup> Similarly, after its own extensive investigation, Amnesty International stated that it “found indisputable evidence that Israeli forces used white phosphorus, which has a highly incendiary effect,” and that it considers the use of white phosphorus in this manner as “a form of indiscriminate attack [that] amounts to a war crime.”<sup>102</sup> Given the aforementioned international laws and their application to the evidence attained, these organizations’ conclusions seem well-founded.

Sara Roy, senior research analyst at the Center for Middle Eastern Studies at Harvard University, said, “While it is important to pay attention

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97. *Id.* at 1.

98. *Id.* at 1.

99. *Id.* at 14.

100. *Id.* at 5.

101. *Id.* at 1.

102. AMNESTY INTERNATIONAL, *supra* note 17, at 5, 10.

to these weapons, the majority of Gazans are being killed by typical military operations. I am a scholar and I use words carefully, and this seems like a massacre.”<sup>103</sup>

#### IV. U.S. MANUFACTURER OR GOVERNMENT INVOLVEMENT

##### A. Whose White Phosphorus?

Perhaps due to the fact that white phosphorus is a chemical weapon and therefore not as widely manufactured as bullets might be, one can easily trace the source. This simply involves looking at the shells that remain after the substance has burst over a certain area to identify the serial number and make of the bomb. To determine the source of the white phosphorus used in Gaza, HRW and Amnesty International sent teams to investigate on the ground to search for such remnants. HRW, Amnesty International, and Reuters photographed and documented white phosphorus remains — both actual phosphorus remnants as well as used and unused casings.

Despite differences in shell sizes, there was one fact that consistently surfaced — all the white phosphorus munitions were manufactured in the United States. In fact, the majority of Israeli weaponry is American-made.<sup>104</sup> Although the extent of HRW’s discussion about U.S. involvement in Operation Case Lead was to identify the source of the white phosphorus, Amnesty International went as far as to say that the United States funded the Gaza attacks.<sup>105</sup> It provided a detailed listing of the different types of weapons used, the sources of the weapons, and took it one step further by identifying the amounts and sources of financial military assistance to the state of Israel.<sup>106</sup> The United States was almost always on top, and at values that were ten-fold larger than the next highest provider.<sup>107</sup> Amnesty International boldly stated that “Israel’s military intervention in the Gaza Strip has been equipped to a large extent by [U.S.]-supplied weapons, munitions and military equipment paid for with [U.S.] taxpayers’ money.”<sup>108</sup> The human rights organizations were even able to trace the white phosphorous to two specific manufacturers. Many, including Amnesty International lawyer Malcolm Smart, have taken the position that given the role of the United States as “the major supplier of weapons to

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103. Marquand, *supra* note 23.

104. Hass, *supra* note 29 (“By and large, the weaponry that Israel is using in American.”); *see generally* AMNESTY INTERNATIONAL, *supra* note 17. However, Israel is also “a significant manufacturer of conventional arms, falling within the top [ten] arms exporters in the world.” *Id.* at 18. It “also relies on imports of military equipment, parts and technologies” from a number of countries, including the United States, Germany, France, the United Kingdom, and Romania. *Id.* at 18–20.

105. *See generally*, AMNESTY INTERNATIONAL, *supra* note 17.

106. *Id.*

107. *Id.*

108. *Id.* at 19.

Israel, the [United States] has a particular obligation to stop any supply that contributes to gross violations of the laws of war and of human rights.”<sup>109</sup>

Generally speaking, there were over a half-dozen American manufacturers of Israeli weapons, including General Dynamics Corporation; Alliant; Raytheon; Pine Bluff Arsenal; Hellfire Systems of Orlando, a Lockheed Martin/Boeing joint venture, under contract with the US Army’s Aviation and Missile Command at Redstone Arsenal, Alabama; and Thiokol Aerospace.<sup>110</sup> Two of these specifically manufactured white phosphorus. The companies manufacturing or assembling the white phosphorus artillery will be identified below with the appropriate identifying information.

### 1. 155mm White Phosphorus

Throughout Gaza, HRW and Amnesty International primarily saw and photographed 155mm artillery carrier shells. They all had either the markings M825 E1 or M825 A1, markings that are specific and unique to U.S.-made munitions.<sup>111</sup> Although all white phosphorus shells would showcase either of these two markings, there is also a manufacturers code engraved in the casing that allows one to identify who produced those specific casings.

#### Thiokol Aerospace, running Louisiana Army Ammunition Plant, April 1989

HRW came across white phosphorus shells all from the same source as is apparent from the markings on the shells. They all had the following manufacturers code: THS89D112-003 155MM M825E1. As HRW explained:

THS89D is the manufacturer identification code denoting that the shells and contents were produced in April 1989 by Thiokol Aerospace, which operated the Louisiana Army Ammunition Plant at the time; 112-003 are the interfix and sequence numbers, which denote that several lots of the same ammunition were being produced simultaneously; 155mm stands for the caliber of the artillery shell. M825E1 is the US military designation for an older remanufactured M825 white phosphorus shell that has been brought up to the current M825A1 standard.<sup>112</sup>

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109. *Amnesty Report: Israel Guilty of War Crimes*, RIVERSCRAP, Feb. 23, 2009, <http://riverscrap.typepad.com/home/2009/02/amnesty-report-israel-guilty-of-war-crimes.html>.

110. Hass, *supra* note 29; AMNESTY INTERNATIONAL, *supra* note 17; HUMAN RIGHTS WATCH, *supra* note 1.

111. AMNESTY INTERNATIONAL, *supra* note 17, at 7; HUMAN RIGHTS WATCH, *supra* note 1, at 13, n.5.

112. HUMAN RIGHTS WATCH, *supra* note 1, at 13.

Therefore, the shells that HRW came across were the older model that had faced flight instability.<sup>113</sup>

Although not stating the specific name of the company — Thiokol Aerospace — Amnesty International came across phosphorus shells from the same manufacturer, but the newer standard model. The photographs show shells with the markings “M825 A1,” the same shells in pictures of IDF stockpiles of white phosphorus shells.

### Pine Bluff Arsenal, 1991 (General Dynamics)

HRW and Amnesty International photographs also evidenced the use of white phosphorus shells produced in September 1991 at Arkansas’ Pine Bluff Arsenal.<sup>114</sup> The artillery shells showcased the marking “PB-91K018-035,” indicating Pine Bluff assembly.<sup>115</sup> The shells were located on the grounds of the UNRWA field operations headquarters compound in Gaza.<sup>116</sup> At 10 a.m. on January 15, 2009, six shells hit the compound that at the time was sheltering 700 people.<sup>117</sup> At least three of the shells contained white phosphorus as was apparent by the light green artillery casings,<sup>118</sup> and as a result of the fires caused by the phosphorus, a massive supply of humanitarian aid was destroyed.<sup>119</sup>

## B. Implications Under International Law

### 1. *Chemical Weapons Convention*

The United States signed the Chemical Weapons Convention on January 13, 1993, and ratified it on April 25, 1997.<sup>120</sup> Therefore, the United States is bound by the obligations imposed upon it by the CWC. As mentioned previously, the CWC bans the use of certain weapons and requires that nations destroy or safely store these listed weapons.<sup>121</sup> Again, although as of yet white phosphorus has not specifically been named as a chemical weapon covered by the Convention, I submit that given the harmful effects of both white phosphorus and white phosphorus fumes and the inability to

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113. *Id.* at 13, n.5.

114. *Id.* at 13 (showcasing a photograph of a white phosphorus shell with the inscription “PB-91K018-035”); AMNESTY INTERNATIONAL, *supra* note 17, at 8; Pine Bluff Arsenal, <http://www.pba.army.mil/Default.htm> (last visited Feb. 2, 2010).

115. AMNESTY INTERNATIONAL, *supra* note 17, at 8.

116. *Id.* at 7.

117. HUMAN RIGHTS WATCH, *supra* note 1, at 41–42.

118. *Id.* at 41, 43.

119. AMNESTY INTERNATIONAL, *supra* note 17, at 7. Medicine, food, and other items were among the supplies destroyed. *Id.*

120. Chemical Weapons Convention Signatories and States-Parties, Arms Control Association, <http://www.armscontrol.org/factsheets/cwcsig> (last visited Feb. 2, 2010).

121. IMPLEMENTATION AND PROSPECTS, *supra* note 72, at 2.

prevent the smoke from reaching and affecting civilian populations, white phosphorus is covered under this Convention. Although the United States now publicly rejects white phosphorus as a chemical weapon, U.S. intelligence even admitted in 2005 that white phosphorus is indeed a chemical weapon.<sup>122</sup> Should the OPCW accept white phosphorus as a chemical weapon, or even if it just categorizes certain uses of it as chemical weapons uses, this would have a significant impact on the United States under the International Law Commission's Articles on Responsibility of States for Internationally Wrongful Acts. The United States provided weapons to Israel, weapons that had it used itself would result in a determination that the United States engaged in wrongful conduct and could potentially impose responsibility on the U.S. for supplying the munitions.

### C. U.S. Law Affecting the Manufacturing and Use of Weapons

In addition to obligations the United States has regarding the manufacturing of weapons and use of its own weapons, the United States also has in place a number of laws controlling the export of arms and foreign assistance. The United States President overseas decisions regarding policy that affects arms trade as well as the issuance of export licenses.<sup>123</sup> Manufacturers or other parties not following these U.S. laws and guidelines can be held accountable for such violations. Included are the U.S. Arms Export Control Act, the Foreign Assistance Act, the U.S. Export Administration Act, and the Leahy Law. The first three of these laws will be addressed in light of U.S. white phosphorus shipments to Israel.

#### 1. U.S. Arms Export Control Act

Congress passed the U.S. Arms Export Control Act ("AECA") to give the U.S. President the authority "to control the export of defense articles and services."<sup>124</sup> Section 4 of the AECA authorizes the supply of U.S. military equipment and training only for lawful purposes of internal security, "legitimate self-defense," or participation in U.N. peacekeeping operations or other operations consistent with the U.N. Charter.<sup>125</sup> Furthermore, §2791(a)(C) requires consideration of "whether, and the extent to which, such sale might contribute to an arms race, aid in the development of weapons of mass destruction, support international terrorism, increase the possibility of outbreak or escalation of conflict, or prejudice the

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122. *Pentagon Admits White Phosphorus is a Chemical Weapon*, MODERATE VOICE, Nov. 22, 2005, <http://themoderatevoice.com/4848/pentagon-admits-white-phosphorus-is-a-chemical-weapon/>.

123. 22 U.S.C. § 2778(a) (1976).

124. *Id.*

125. *Id.*

development of bilateral or multilateral arms control or nonproliferation agreements or other arrangements.”<sup>126</sup>

It is clear from these provisions that the U.S. government puts at least some weight on the manner in which its munitions sales and exports to foreign countries may affect world relations. However, how effective are these “considerations”? Are they suggestions or is there a repercussion for failing to realize wrongful end-use of U.S. munitions? A thorough look at the AECA shows that there seem to be no provisions directly penalizing a failure of consideration of situations under section 2791. Generally, criminal or civil penalties are applied when a manufacturer fails to follow procedural requirements, such as obtaining a license or registering its company before engaging in arms sales and export.<sup>127</sup> However, sections 2753 and 2754 together provide a requirement that if there is any suggestion or potential evidence that U.S. munitions have been used in a manner not permitted under section 2754, the President must look into the matter and report to Congress within thirty days.<sup>128</sup>

Congressman Dennis Kucinich took initiative and on January 5, 2009, while attacks were still underway, sent a letter to the Bush Administration’s Secretary of State Condoleezza Rice “request[ing] an examination of Israel’s compliance with the provisions of the [AECA].”<sup>129</sup> As of yet, there is no record of a response. What is the penalty for failing to fulfill this requirement? What is the next step after such a report is issued? These are questions that should and must be addressed by U.S. Representatives in assessing our nation’s arms controls. The lack of response certainly seems discouraging in terms of ensuring accountability, but there are other potential routes.

The second method is to research and see whether the manufacturers, Thiokol Aerospace or General Dynamics, failed to satisfy any of the procedural requirements necessary in their registration or application for licenses. Although a more indirect approach, this route succeeded in convicting a major corporation, ITT Corporation (“ITT”), and fining it \$100 million for “illegally export[ing] military night vision goggles to China.”<sup>130</sup> Although part of the conviction relied on sales to China, hence jeopardizing national security, ITT also sold these night vision goggles to Singapore and the United Kingdom, both countries allies to the United States.<sup>131</sup> So why the fine and conviction? ITT failed to fill out the proper paperwork and

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126. 22 U.S.C. § 2791(a)(C) (1976).

127. See, e.g., 22 U.S.C. §2778(c) (1976).

128. 22 U.S.C. §§2753–54 (1976).

129. Dennis Kucinich, *Israel May be in Violation of Arms Export Control Act*, Jan. 6, 2009, <http://kucinich.house.gov/News/DocumentSingle.aspx?DocumentID=108151>.

130. Drew Cullen, *ITT Fined \$100m for Shipping Night Vision Goggles to China*, THE REG., Mar. 27, 2007, [http://www.theregister.co.uk/2007/03/27/itt\\_fined\\_for\\_illegal\\_exports/](http://www.theregister.co.uk/2007/03/27/itt_fined_for_illegal_exports/).

131. *Id.*

provide all the necessary information requested under the AECA.<sup>132</sup> “According to the [Department of Justice], ITT will be the first major defense contractor convicted of a criminal violation of the [AECA].”<sup>133</sup>

So who would have to bring a lawsuit, and who should be sued if the government is in some way associated with the sales? Although a U.S. defense contractor sold the ITT products in the case just mentioned, it was the company that was fined.<sup>134</sup> This is because the company is the entity that failed to follow proper procedures, not the government. In fact, it was a government office, the Office of the Directorate of Defense Trade Controls, Bureau of Political-Military Affairs in the U.S. Department of State that initiated the proceedings against ITT.<sup>135</sup> Therefore, should there be a procedural failure by Thiokol Aerospace or General Dynamics, even if there was government involvement, it is the company in the end that faces the penalty.

This suggests that after the President has the matter looked into under section 2753 of the AECA, should even a procedural violation be found, the U.S. government could and probably would sue the corporation for its violations. Like Singapore and the United Kingdom, Israel is an ally of the United States, but even ally status does not prevent a company from being penalized for failure to follow proper U.S. governmental procedures. An investigation into the paperwork and applications of the two companies would be crucial to pursuing this second claim, and unfortunately as of now this information is not publicly available. Therefore, the first essential step is to begin an investigation into whether there were procedural or substantive violations of the AECA.

A third, yet perhaps less compelling, argument involves section 2780 of the AECA, titled “Transactions with Countries Supporting Acts of International Terrorism.”<sup>136</sup> At first glance, one may ask how Israel would be supporting terrorism when it repeatedly asserts its position of fighting terrorism. However, a closer look at the provisions of section 2780 suggest that there may be a feasible argument under this section. This provision prohibits “[e]xporting or otherwise providing (by sale, lease or loan, grant, or other means), directly or indirectly, any munitions item to a country described in subsection (d).”<sup>137</sup> Subsection (d) prohibits providing to a foreign government that “has repeatedly provided support for acts of international terrorism.”<sup>138</sup>

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132. *Id.*

133. *Id.*

134. *Id.*

135. U.S. STATE DEPT., CONSENT AGREEMENT, 2007: ITT CORPORATION (2007), [http://pmdtc.state.gov/compliance/consent\\_agreements/pdf/ITTcorp\\_consentagreement.pdf](http://pmdtc.state.gov/compliance/consent_agreements/pdf/ITTcorp_consentagreement.pdf).

136. 22 U.S.C. § 2780 (1961).

137. § 2780(a)(1).

138. § 2780(d).

Although the acts that took place in Gaza are not what one thinks of when thinking of the conventional definition of terrorism, what is relevant is how the statute itself defines such acts. Section 2780(d) continues by stating that these acts “include all activities that . . . willfully aid or abet the efforts of an individual or group to use, develop, produce, stockpile, or otherwise acquire chemical, biological, or radiological weapons.”<sup>139</sup> Section 2780 provides for both a criminal and civil penalty for violating this statute, a criminal fine of up to one million and a civil penalty up to \$500,000.<sup>140</sup> The key to using this argument is first establishing that white phosphorus is in fact a chemical weapon. As mentioned in section III(A)(4) above, there is a strong case for arguing that white phosphorus is a chemical weapon, and therefore, there is a chance that this approach may succeed, but the most likely successful method is the second, procedural approach.

In other words, there are a number of potential approaches to holding either weapons manufacturers liable under the AECA. The past indicates that even Israel could be sanctioned as it was in 1982 “for its misuse of American-supplied weapons under the AECA; in that case the Reagan Administration suspended the provision of cluster munitions to Israel after determining that Israel misused those munitions in its 1982 offensive in Lebanon.”<sup>141</sup> Whether the result is to prevent U.S. manufacturers from making weapons or sanctioning foreign countries by prohibiting them from receiving such weapons, it is clear that something needs to prevent further misuse of U.S. weapons resulting in the loss of innocents — whether in the U.S. or abroad — and the AECA may provide a solution.

## 2. *Foreign Assistance Act*

The AECA references the Foreign Assistance Act, a law that prohibits assisting foreign countries that engage “in a consistent pattern of gross violations of internationally recognized human rights.”<sup>142</sup> Specifically, section 502B states:

[N]o security assistance may be provided to any country the government of which engages in a consistent pattern of gross violations of internationally recognized human rights’ which includes ‘acts of torture or cruel, inhuman, or degrading treatment or punishment, prolonged detention without charges and trial, causing the disappearance of persons

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139. § 2780(d).

140. § 2780(j)–(k).

141. NAT’L LAWYERS GUILD, *ONSLAUGHT: ISRAEL’S ATTACK ON GAZA & THE RULE OF LAW* 32 (2009), <http://www.nlg.org/NLGGazaDelegationReport.pdf>.

142. 22 U.S.C. § 2304(a)(2).

by the abduction and clandestine detention of those persons, and other flagrant denial of the right to life, liberty, or the security of person.<sup>143</sup>

The AECA conditions military sales “only when they are consistent with . . . the purposes of the foreign assistance program of the United States as embodied in the Foreign Assistance Act of 1961.”<sup>144</sup> The National Lawyers Guild sent a team to Gaza to assess the impact of the attacks and whether U.S. law was violated by the events of Operation Cast Lead.<sup>145</sup> Their report explained that

The AECA includes a provision that “sales [of military equipment] be approved only when they are consistent with . . . the purposes of the foreign assistance program of the United States as embodied in the Foreign Assistance Act of 1961.” In order to serve these purposes, the AECA allows the United States to provide defense articles and services to a foreign country only for one or more of four following purposes, (i) internal security, (ii) legitimate self-defense, (iii) to permit participation in regional or collective arrangements consistent with the United Nations Charter or when requested by the United Nations for international peacekeeping, and (iv) to assist undeveloped friendly foreign countries to develop public infrastructure. In order to receive assistance under the AECA, foreign countries are required to agree not to use military assistance for purposes other than those enumerated unless the consent of the President of the United States has been obtained.<sup>146</sup>

Israel claims that its actions were for defense purposes — within the limitations of the Foreign Assistance Act. Therefore, the key is determining whether using white phosphorus in a manner that affected a large number of civilians in a high-density population area is a ‘legitimate self-defense’ initiative. Taking into consideration the principle of proportionality, a customary international law, a country can defend itself but only if its response is proportional to the injury it experienced.<sup>147</sup> Given that Israel suffered ten deaths from Gazan attacks in a span of six years and responded by killing over 1,000 people in approximately three weeks, using incendiary weapons hardly seems proportional.<sup>148</sup> Under these facts, it is hard to argue that Israel’s actions fell within what may be deemed legitimate self-defense. This would mean the United States assisted Israel in actions not within the

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143. AMNESTY INTERNATIONAL, *supra* note 17, at 19.

144. NATIONAL LAWYERS GUILD, *supra* note 141, at 37.

145. *See generally, id.* at 37 (discussing the purpose and scope of the investigation).

146. *Id.* at 37.

147. Lionel Beehner, *Israel and the Doctrine of Proportionality*, COUNCIL ON FOREIGN RELS., Jul. 16, 2006, <http://www.cfr.org/publication/11115/>.

148. Israel Ministry of Foreign Affairs, *Rocket Threat from Gaza Strip, 2000–2007*, Dec. 16, 2007, available at <http://www.mfa.gov.il/MFA/Terrorism+Obstacle+to+Peace/Terror+Groups/Rocket+threat+from+the+Gaza+Strip+2000-2007.htm>.

scope of the Foreign Assistance Act. Given this conclusion, under the Act any assistance to Israel should cease immediately.<sup>149</sup>

### 3. *U.S. Export Administration Act*

The U.S. Export Administration Act makes an exception to the limitations presented in the Foreign Assistance Act, permitting security assistance “if the President certifies that ‘extraordinary circumstances’ exist.”<sup>150</sup> There is not much to say here other than the fact that there was clearly no extraordinary circumstance involved. According to the Israel Ministry of Foreign Affairs, Israel has been encountering home-made Qassam rockets fired by the Palestinians since 2001.<sup>151</sup> Between 2001 and 2007, a total of ten lives were lost.<sup>152</sup> In the three-week attack on Gaza, over 1,000 Palestinians were killed.<sup>153</sup> What the extraordinary circumstance is that would justify indiscriminate use of incendiary weapons remains a mystery.

## V. CONCLUSION

In the end, the goal is better world relations between countries and security for one’s own nation. When one country is using weapons, chemicals, or whatever you choose to call the substance, the fact of the matter is that it is burning the bodies of innocent civilians, and this cannot be good for the promotion of peace. When referring to America’s use of white phosphorus in Fallujah, Iraq, Kathy Kelly with an anti-war group called Voices of the Wilderness said:

If the United States wants to promote security for this generation and the next, it should build relationships with these countries. If the United States uses conventional or non-conventional weapons, in civilian neighbourhoods [sic], that melt people’s bodies down to the bone, it will leave these people seething. We should think on this rather than arguing about whether we can squeak such weapons past the Geneva Conventions and international accords.<sup>154</sup>

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149. NATIONAL LAWYERS GUILD, *supra* note 141, at 33 (“Using United States military assistance inconsistent with the Act will lead to a finding of a ‘substantial violation’ and under such circumstances military assistance to the violator must be terminated.”).

150. AMNESTY INTERNATIONAL, *supra* note 17, at 19.

151. Israel Ministry of Foreign Affairs, *supra* note 148.

152. *Id.*

153. Reuters, *Death Toll in Gaza Offensive Tops 1,000*, IRISH TIMES, Jan. 14, 2009, <http://www.irishtimes.com/newspaper/breaking/2009/0114/breaking3.htm>.

154. Andrew Buncombe & Solomon Hughes, *The Fog of War: White Phosphorus, Fallujah and Some Burning Questions*, THE INDEP., Nov. 15, 2005,

The same can be said about the United States manufacturing the weapons, even if it is not the one using them. One cannot ignore the message relayed with the United States on the one hand calling for a peace plan between Israelis and Palestinians, and on the other, serving as the largest supplier of weapons to Israel. Palestinians walk in the streets and find the remains of bombs or other weapons with the words “Made in the U.S.A.” emblazoned on the front. If morals do not have a place in this debate, countries should and must at least anticipate the effect of their manufacturing of weapons used in conflicts around the world and assess how that can affect their own national security.

Finally, this Paper proposes that in order to further efforts to protect civilians in times of war and given numerous less harmful alternatives, an outright ban on the use of white phosphorus as a smokescreen or weapon in general should be administered, whether in densely populated areas or otherwise. Currently, tear gas is banned in the CWC but phosphorus, a chemical that burns humans right down to the bone, remains unlisted.<sup>155</sup> This is but one feasible change that can help save innocent lives in future warfare.

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<http://www.independent.co.uk/news/world/americas/the-fog-of-war-white-phosphorus-fallujah-and-some-burning-questions-515345.html>.

155. Hass, *supra* note 29.