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White Phosphorus: Smokescreen or Smoke and Mirrors?

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White Phosphorus: Smokescreen or Smoke and Mirrors?

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Abstract

Chemical and biological weapons have for centuries been relegated to a widely disfavored status among most nation States. Since these early times, it has been recognized that the use of these weapons, even during the chaotic realm of warfare, is unnecessary and unnatural. As such, there have evolved in the past 150 years several conventions that have codified this increasingly apparent sentiment of non-use, eventually culminating in the ideal of non-proliferation. Today, however, the changing atmosphere of the battlefield and the foreign tactics employed therein have led to a resurgence of the utility of using such weapons, particularly since certain chemical and biological weapons have otherwise practical military applications. Ultimately though, it is clear that the national security concerns of one State pale against the vision contemplated in these weapons conventions. In our increasingly global society, regional stability has more universal implications, and this, among other reasons, is the reason that weapons like white phosphorus threaten to capsize the precarious balance achieved today as a result of these several conventions. Therefore, it is the duty of those States, such as the United States, who have been known to use white phosphorus, to monitor their compliance not only with the treaties to which they are party, but also to adhere to the tenets accepted as peremptory in the world community.

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I. Introduction

The global community has recognized, at a respectably early point in modern history, the need to effectuate control and limitation upon the use of chemical and biological agents during warfare. While the concept of a “law of war” is somewhat counter-intuitive, it nonetheless exists in modern societies to some extent. There actually is an affirmative “law of war” governing the use of chemical and biological agents, particularly given the potential widespread harm that has resulted and could again in the future, but the real issue is whether States today comply with these laws as written. In some cases, States are ready to comply with imposed measures that require them to limit their usage of such agents and even dispense with their supply of such. Reasons for this might include bargaining for purposes of procuring guarantees of security from certain rival States, or it might be for entirely philanthropic, humanitarian reasons. In other cases, there are States that feign compliance in order to seek the approval of the world community, but in reality continue to pursue illegal means of warfare and proliferation with impunity. Why States may continue this defiant trend is open to debate, but in the case of the United States, one reason might very well be a non-negotiable need to maintain security. The appropriateness of an unyielding need for security can be weighed against a counter-balancing factor of the security interests of the world.¹

The paper seeks first to cite what exactly stands as the global measuring stick for proper use (or more appropriately, non-use) of chemical and biological agents in warfare. The relevant

¹ The “security of the world” as used herein is an encompassing statement which includes not only regional and global security, but the repercussions that necessarily would follow from the use of chemical and biological agents. This would certainly not be limited to physical manifestations thereof, such as mutation, fall-out, disease, environmental collateral damage, etc. Use of chemical and biological agents in open warfare could set an ominous and unnerving precedent for other States to do the same. Furthermore, regional destabilization would certainly result from a State administering the international “low-blow” of deploying chemical or biological weapons. Likely an arms race would commence; this is discussed in Section V(B), *infra*. See generally GERT HARIGEL, *The Concept of Weapons of Mass Destruction: Chemical and Biological Weapons, Use in Warfare, Impact on Society and Environment*, Oct. 2000 available at <http://lxmi.mi.infn.it/> (last accessed Nov. 30, 2009).

laws are found within the 1899 Hague Convention, the 1925 Geneva Protocol, the 1972 Bacteriological Weapons Convention, the 1980 Convention on Conventional Weapons, and the 1993 Chemical Weapons Conventions. States' obligations outlined in these agreements are the standard by which they all should be evaluated to determine their compliance.

The paper first surveys these agreements and then separately considers the United States' compliance with each of the latter three conventions. The United States' historic compliance, that is to say, its actual use (or non-use) and non-proliferation of chemical and biological weapons is introduced to determine the effectiveness of these international laws.² This is evaluated in depth, specifically in the context of recent allegation of the United States' violating these conventions. Finally, if there is non-compliance with either the Conventions, Protocols, or the United States' own internal laws, this paper balances national security as a reason for why the United States may have purposely maintained non-compliance against global security concerns. Giving due discourse to a State's non-compliant conduct is key to properly evaluating the dichotomy between these competing matters. Ultimately, the paper reinforces global safety as a paramount concern over the security of any single State, particularly in light of recent violations of international law, in the context of using and proliferating chemical or biological weapons.

II. The Hague Conventions and the Geneva Protocols on Chemical and Biological Warfare

Biological and chemical weapons have been employed almost as long as mankind has waged war. Ancient civilizations were known to utilize toxic elements from plants, animals, and

² This question can be rephrased as "Have the international laws in place, as written, appropriately addressed the United States' use or nonproliferation, if any, of chemical and biological weapons?"

minerals as a battlefield equalizer.³ There is much evidence pointing to the use of these weapons; proof of Romano-Sassanid usage of chemical weapons was unearthed as late as 2009.⁴ An earlier example is recounted in Thucydides' *History of the Peloponnesian War* (431 – 404 BCE). In it, the Greek historian describes how Spartans drenched bunches of sticks in pitch⁵ and sulfur, and then burned them underneath the walls of the Athenian city Plataea in 428 BCE.⁶ In 332 BCE, Alexander's siege of Tyre was met with fierce resistance, which included catapulting burning sand – likely to have the same effects as white phosphorus would today.⁷ The Byzantines discovered a particularly lethal weapon for use at sea, blowing naphtha⁸ through bronze tubes and igniting enemy vessels.⁹

The Hague Convention and Geneva Protocols on Chemical and Biological Warfare represent a world-wide effort to codify and harmonize the contemporary sentiment of outlawing these weapons that cause such unnecessary suffering.¹⁰ The 1925 Geneva Protocol states that the use of such weapons “has been justly condemned by the general opinion of the civilized world.”¹¹ While these recent, formal agreements are indicative of this contemporary sentiment, a quick survey of history reveals that the intent that led to the eventual formulation of these

³ ISHAAN THAROOR, *Why Chemical Warfare is Ancient History*, TIME, Feb. 13, 2009 available at <http://www.time.com> (last accessed Nov. 30, 2009).

⁴ UNIVERSITY OF LEICESTER, *Archeologist Uncovers Evidence Of Ancient Chemical Warfare*, SCIENCEDAILY, Jan. 15, 2009 available at <http://www.sciencedaily.com> (last accessed Nov. 30, 2009).

⁵ An archaic term referring to a viscous substance with flammable properties, obtained from the distillation of organic materials. “Pitch.” MERRIAM-WEBSTER ONLINE DICTIONARY available at <http://www.merriam-webster.com/dictionary/pitch> (last accessed Nov. 30, 2009).

⁶ THUCYDIDES, *History of the Peloponnesian War* (431 – 404 BCE), 2:8 (Richard Crawley trans.) available at <http://www.mlahanas.de> (last accessed Nov. 30, 2009).

⁷ THAROOR, *supra* note 3 citing Adrienne Mayor (“Falling from the sky, the sand ‘would have had the same ghastly effect of white phosphorus’”). Adrienne Mayor is a classical folklorist and the author of *Greek Fire, Poison Arrows and Scorpion Bombs: Biological & Chemical Warfare in the Ancient World*.

⁸ A distillation product of petroleum or coal-tar containing hydrocarbons. It is particularly volatile and flammable. “Naphtha.” WIKIPEDIA available at <http://en.wikipedia.org> (last accessed Nov. 30, 2009).

⁹ MICHAEL R. GRAY & KENNETH R. SPAETH, *The Bioterrorism Sourcebook* 363 (2008).

¹⁰ GENEVA PROTOCOL FOR THE PROHIBITION OF THE USE OF ASPHYXIATING, POISONOUS OR OTHER GASES, AND OF BACTERIOLOGICAL METHODS OF WARFARE, JUN. 17, 1925.

¹¹ *Id.*

agreements has existed from an appreciably earlier point – as early as the 17th century.¹² This section will begin with a brief historical survey of international agreements leading up to and culminating with the 1925 Hague Convention.

A. History of International Agreements Outlawing Chemical and Biological Weapons

There is a misconception that outlawing certain weapons for the purpose of reducing unnecessary suffering is a modern concept. This is largely untrue; laws governing the use of certain weapons during wartime have their humble roots in the annals of history. An early example of guidance conferring an obligation to avoid a type of chemical warfare was from the Prophet Muhammad. He was quoted, in *hadith*¹³, as saying “Do not cut down fruit-bearing trees and do not poison the wells of your enemies.”¹⁴ There was an implicit recognition within Islam that wars were to be fought openly on the battlefield. To engage in such sabotage which could result in unnecessary harm to non-combatants was ignoble and an effrontery to the honor found in just war. Indeed, religion was among the first institutions that lent support to the idea that the use of these weapons was a kind of aberration on the battlefield.¹⁵

¹² See COREY J. HILMAS ET AL., *History of chemical Warfare*, in MEDICAL ASPECTS OF CHEMICAL WARFARE 9, 11 (Tourinsky et al., ed., 2008). At least, this can be traced back to what is recorded.

¹³ *Hadith* are the recorded statements of the Prophet Muhammad that serve as recommendations and guidance for Muslims.

¹⁴ MUTTA MALIK, 21 §3(10).

¹⁵ Austrian historian and chemist Wulff von Senfftenberg wrote, “It was a sad business [referring to the use of the arsenic cloud, a poisonous gas weapon]. Christians must never use so murderous a weapon against other Christians.” HILMAS ET AL., *supra* note 12 citing K. COLEMAN, *A History of Chemical Warfare* 6-7 (2005). Interestingly, von Senfftenberg wrote the recipes for this and other weapons. JAMES RIDDICK PARTINGTON & BERT S. HALL, *A History of Greek Fire and Gunpowder* 170 (1999). See also THE LAWS OF MANU 7:90 (George Buhler trans.) available at <http://www.sacred-texts.com> (last accessed Nov. 30, 2009) (stating that Hindu Brahmans, the most noble of all the castes, should not employ “weapons concealed (in wood), nor with (such as are) barbed, poisoned, or the points of which are blazing with fire” in battle).

The first recorded international agreement was the Strasbourg Agreement of 1675, which precluded France and the Holy Roman Empire from employing poison bullets in warfare.¹⁶ Specifically, the agreement banned the use of “perfidious and odious” toxic devices.¹⁷ This was a significant step, given that incendiary weapons that produced fumes were regularly employed at this time.¹⁸ In 1854, the British Ordnance Department expressed the unpopularity of chemical weapons particularly when they rejected a proposal to utilize cacodyls cyanide artillery shells to break an ongoing siege, analogizing its use to the same “bad ... mode of warfare as poisoning the wells of the enemy.”¹⁹ It was not until 1874 that the international community took more than a cursory interest in addressing a ban on such weapons. Article 13 of the Brussels Declaration of 1874 contains what is the first modern international ban on chemical weapons. It states, in relevant part, that it is “especially forbidden to employ poison or poisoned arms ...”²⁰ The Brussels Declaration was never signed by all fifteen countries party to it and therefore was never ratified. However, the text of the Brussels Declaration was incorporated verbatim into the Hague Convention of 1899 as Annex A, in which Article 23 is the relevant provision which states the same as Article 13 of the Brussels Declaration.²¹

B. Early Framework for International Agreements

It was at the Hague Convention of 1899 that the use of chemical weapons was first addressed. As previously noted, the Brussels Declaration was never ratified, but its language was reproduced in the Hague Convention of 1899. It was in this document that not only was the

¹⁶ HILMAS ET AL., *supra* note 12. This was following the Bishop of Munster Cristoph Bernhard van Galen’s use of incendiary weapons and weapons producing toxic fumes during the 1672 Munster siege of the Dutch stronghold of Groningen.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ THOMAS WEMYSS REID, *Memoirs and Correspondence of Lyon Playfair* 159 (1976).

²⁰ BRUSSELS DECLARATION OF 1874, ART. 13, JUL. 27, 1874.

²¹ THE HAGUE CONVENTION (II) ON THE LAW AND CUSTOM OF WAR ON LAND OF 1899, ANN. A, §II, CH. 1, ART. 23, JUL. 29, 1899, 32 Stat. 1803, TS 403, 1 Bevans 247.

above provision outlawing poisoned arms entered in force, but additional wartime limitations were also imposed on contracting parties. Specifically, gas-emitting projectile weapons were banned under the 1899 Convention's Declaration (IV, 2) on the Use of Projectiles the Object of Which is the Diffusion of Asphyxiating or Deleterious Gases.²² This declaration cites the Declaration of St. Petersburg as being the source of its inspiration.²³ Portions of the St. Petersburg Declaration are significant to note, as they are the precursor statements that outline what might fall under the banner of the "security of the world."²⁴ The preamble states that there are some cases in which the "necessities of war should yield to the requirements of humanity."²⁵ The Declaration went on to state that given that as civilization was progressing, bearing the consequences of war was less and less appropriate.²⁶ Specifically, the use of weapons which resulted in "uselessly [aggravating] the sufferings of disabled men, or [rendered] their death inevitable" would be "contrary to the laws of humanity."²⁷ The Declaration was enacted ultimately to prohibit the use of low-weight projectile weapons that would burn or explode on impact.²⁸

It seems that the overall trend that prevailed was toward a sense of establishing "civilized" conduct during warfare. While the days of savage, brutal conquest of States was a memory of humanity's dark past, there were no specific rules that delineated what conduct was prohibited (and thus, theoretically, actionable by contracting parties). This is reflected in the

²² CONVENTION'S DECLARATION (IV, 2) ON THE USE OF PROJECTILES THE OBJECT OF WHICH IS THE DIFFUSION OF ASPHYXIATING OR DELETERIOUS GASES, JUL. 29, 1899. Note the United States was not a signatory to this declaration.

²³ *Id.* See THE DECLARATION OF ST. PETERSBURG, NOV. 29, 1868.

²⁴ See *supra*, note 1.

²⁵ THE DECLARATION OF ST. PETERSBURG, NOV. 29, 1868.

²⁶ *Id.*

²⁷ *Id.* Of interest is that this Declaration alludes to "the laws of humanity." An appeal to a higher, natural law seems to be the course by which several States agreed and could feel bound to abide by such otherwise hollow contracts.

²⁸ *Id.* "The Contracting Parties engage mutually to renounce ... the employment ... of any projectile below 400 grammes, which is either explosive or charged with fulminating or inflammable substances."

modern trend to outlaw the use of chemical and biological agents, culminating in the Chemical Weapons Convention of 1993. Still, there is a real contrast between the early recognition of civility in warfare and the increased need for security that has developed today in spite of this continuing protocol.²⁹ States were scrutinized for their conduct during wartime, and no longer was the argument of military necessity an exculpatory factor for violations of these agreements.³⁰ The pendulum began its swing with such declarations aimed at minimizing human suffering. On one hand, reducing human suffering was the reason to enact such international agreements. But it may soon become apparent that in order to minimize human suffering, such suffering may be necessary.³¹ Whether this amounts to using chemical or biological agents is a matter of significant debate.³²

C. Significant Subsequent Agreements

There were more international conventions and agreements following the 1899 Hague Convention that sought to further expound on its intent with specificity. The Convention (IV) respecting the Laws and Customs of War on Land and its annex was not much more than a

²⁹ It is proposed *infra* that the temptation of using such chemical and biological weaponry (obviously in violation of all relevant international agreements) against certain enemies or in certain circumstances compels a strong argument but must nevertheless be avoided. *See* Section V(A), *infra*.

³⁰ GABRIELLA BLUM, *The Law of War and the Lesser Evil*, Harvard Law School Faculty Scholarship Series, Paper 24 (2008). According to Blum, this was because military necessity had already been accounted for implicitly within these rules and would be a redundant basis to claim justification. There simply existed no military necessity that would countermand the cessation of unnecessary human suffering. *See also infra* Section V(A) discussing any possible viability of the “necessity defense.”

³¹ The United States reserved under Protocol III of the Bacteriological Weapons Convention in 2009, stating that it retained the right to employ incendiary weapons over civilian areas after balancing estimates of collateral damage. *See infra* Section III(A) for detailed discussion.

³² For example, while chemical and biological weapons are largely outlawed today, some may argue that there is a justification to use them in protection of the greater good, as in an effective means to smoke out insurgent forces who plot explosions within various metropolitan areas, which could result in the death of thousands. This may, again, be a basis around which the United States or any State may be inclined (or have been in the past) to use chemical or biological weapons. The controversy truly arises when the merits of this justification are propounded; that is, does the threat to a particular States’ security warrant the use of drastic measures as chemical and biological weapons that have affirmatively been outlawed? Exploring this inevitably starts the balancing test of global versus national interests.

conference to add parties to the 1899 Hague Convention.³³ The 1899 and 1907 Hague Conventions together are generally regarded as the framework for customary international law³⁴ recognizing a universal prohibition on the use of chemical weapons.³⁵ The League of Nations convened a conference in response to World War I, in which the victorious powers drafted a treaty which would ban the “use in war of asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices ...”³⁶ France’s non-ratification of this treaty prevented its entry into force for all the treaty’s parties.³⁷

The most significant initial undertaking in the 20th Century is found in the Protocol for the Prohibition of the Use of Asphyxiating, Poisonous, or other Gases, and of Bacteriological Methods of Warfare.³⁸ This Geneva Convention was the largest single convention addressing prohibitions on the use of chemical *and* biological weapons.³⁹ The Protocol reaffirms the condemnation of the use of asphyxiating, poisonous gases and analogous liquids in the same vein that the 1922 League of Nations treaty did, but takes the prohibition one step further: “The High Contracting Parties ... agree to extend this prohibition to the use of bacteriological methods of

³³ THE HAGUE CONVENTION (IV) RESPECTING THE LAWS AND CUSTOMS OF WAR ON LAND, WITH ANNEX OF REGULATIONS, OCT. 18, 1907, 36 Stat. 2277, TS 539, 1 Bevans 631. The differences between the 1899 and 1907 Conventions, while certainly significant in the larger international context, have little bearing on prohibitions to chemical and biological warfare and thus shall not be explored here.

³⁴ Customary international law refers to unwritten law that is recognized by a great majority of states and to which a majority of states have not objected. RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE U.S. §102(2) (1987).

³⁵ JUDICIAL DECISIONS, *The Law Relating to War Crimes and Crimes Against Humanity*, reproduced in 41 AM. J. INT’L LAW 248, 249 (1947).

³⁶ TREATY RELATING TO THE USE OF SUBMARINES AND NOXIOUS GASES IN WARFARE ART. 5, FEB. 6, 1922, 25 LNTS 202 (1922).

³⁷ *Id.*

³⁸ PROTOCOL FOR THE PROHIBITION OF THE USE OF ASPHYXIATING, POISONOUS, OR OTHER GASES, AND OF BACTERIOLOGICAL METHODS OF WARFARE, JUN. 17, 1925, 26 UST 571, TIAS 8061, 94 LNTS 65. Note the United States did not ratify this treaty until 1975 following President Nixon’s renunciation of biological weapons in 1968.

³⁹ *Id.* It is emphasized that this is the first international agreement that recognizes the danger behind the use of biological agents, given the research that was occurring at the time. See THOMAS J. JOHNSON, *A History of Biological Warfare from 300 B.C.E. to the Present*, American Association for Respiratory Care, School of Health Professions, Jul. 16, 2009 available at <http://www.aarc.org> (last accessed Nov. 30, 2009) (citing early German development and use of anthrax against French and Russian livestock).

warfare and agree to be bound as between themselves ...”⁴⁰ While this was the most comprehensive ban on chemical and biological weapons, it had two significant drawbacks: there was no way of monitoring compliance, and nothing in the Protocol banned the proliferation of these weapons. The United Nations reinforced the 1925 Protocol with several General Assembly Resolutions, the most significant being espoused in 1966, which set out to define chemical and biological weapons under the Protocol.⁴¹ The Resolution embarked to clarify that all chemical and biological weapons fell under the conscience of the 1925 Protocol, regardless of any new technological innovation.⁴² It defines chemical weapons as “any chemical agents of warfare – chemical substances, whether gaseous, liquid, or solid – which might be employed because of their direct toxic effects on man, animals, and plants.”⁴³ Biological weapons are defined as “any biological agents of warfare, whatever their nature, or infective material ... intended to cause disease or death in man, animal, and plants, and which ... [can] multiply in the [victim].”⁴⁴ The Resolution went on to invite additional State parties to join the 1925 Protocol, reaffirming it and expressing the U.N.’s wishes to halt proliferation of such weapons.⁴⁵

III. Recent International Conventions and United States Compliance

The United States has historically complied with international agreements proposing bans on the use of chemical and biological weapons and non-proliferation of the same. This is largely with respect to the United States’ ubiquitous international involvement and a growing sense of urgency to ensure international peace.⁴⁶ The United States has asserted and reasserted its pledge

⁴⁰ PROTOCOL, JUN. 17. 1925, *supra* note 38.

⁴¹ G.A. RES. 2603 (XXIV), ¶ 7(a), (b), U.N. DOC. A/7890 (Dec. 16, 1969).

⁴² *Id.* at ¶ 5.

⁴³ *Id.* at ¶ 7(a).

⁴⁴ *Id.* at ¶ 7(b).

⁴⁵ *Id.* at ¶ 5, U.N. DOC B/7890 (Dec. 16, 1969). The Resolution also mentions that it welcomed proposals for halting production as soon as its next session, and one such draft was being written. *Id.* at §III(1), U.N. DOC B/7890 (Dec. 16, 1969).

⁴⁶ UNITED NATIONS SECURITY COUNCIL, *Note by the President of the Security Council*, S/23500 January 31, 1992.

to achieving a means through which use and proliferation of chemical and biological weapons (and, for that matter, nuclear and other weapons of mass destruction) can be completely curtailed; these means include verification and enhanced transparency.⁴⁷ However, while the United States has pledged its commitment in this regard, it has also engaged in illicit conduct and has excepted legislation which may further this end, both which frustrated its own stated goal. There are allegations that the United States has actually used certain weapons which may qualify as chemical weapons. The reasons the United States cites for doing so are many, but they primarily revolve around national security. Regarding the exceptions, the United States has expressed that certain international legislation has been under- (or over-) inclusiveness and is ineffective in actually curbing use and proliferation of chemical or biological weapons. Again, these factors must be balanced against global security interests to determine which holds more weight, and if absolutely or with reservation. The three conventions – BWC, CCW, and CWC – will be evaluated, and in turn, the United States’ compliance will be compared to these standards.

A. The Biological Weapons Convention (BWC) of 1972 and United States Compliance

The next significant international agreement, which finally addressed proliferation, was the 1972 Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (hereinafter “BWC”).⁴⁸ Article I orders the cessation of production and stockpiling of biological agents.⁴⁹ Article II commands States to destroy existing stockpiles, to be completed within nine (9)

⁴⁷ Final Communiqué, *Ministerial meeting of the North Atlantic Council*, May 24, 2000 available at <http://www.nato.int> (last accessed Nov. 30, 2009).

⁴⁸ CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION, AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION, APR. 10, 1972, 26 UST 583, TIAS 8062, UNTS 163. The United States ratified this treaty in 1975.

⁴⁹ *Id.* at ART. I.

months of the ratification of the BWC.⁵⁰ Other articles of the BWC encourage member States to work together to affect this end.⁵¹ Conspicuously absent from the BWC was any similar agreement governing the use of *chemical* weapons, but Article IX reflects the intent of the States to negotiate such an agreement in the near future.⁵² Member States of the BWC agreed that proliferation of biological weapons would be more easily monitored than that of chemical weapons, and that the use of biological weapons would confer no significant military advantage.⁵³ However, Article VI of the BWC supplies a weak mechanism to ensure compliance – member States may lodge a complaint against the offending State, which is followed by a U.N. Security Council investigation.⁵⁴ In response and in recognition of this, the members States of the BWC created an Ad Hoc Group in 1994 to negotiate compliance with the BWC and ensure the most transparency possible.⁵⁵ The Ad Hoc Group’s findings were that contrary to the BWC, the number of States possessing biological weapon stockpiles had more than doubled since the convention’s entry date.⁵⁶ The Group remarked on a number of factors that made proliferation of biological weaponry actually more difficult to monitor than that of chemical weapons⁵⁷:

1. Small amounts of biological weapons could be militarily significant (as opposed to a larger quantity of chemical weapons).
2. Some biological toxins have legitimately peaceful purposes (such as vaccines, versus chemical weapons which can be banned outright as they have no legitimate purpose).
3. Intent of biological toxin use would have to be qualified in order to determine whether such was peaceful or not (and subjective intent is difficult to evaluate).
4. Technological advances have rendered potential biological weapon usage as increasingly clandestine.
5. Advances in technology have also led to the “clean-in-place” system, which is a mechanism developed to erase the evidence of biological weapon usage.

⁵⁰ *Id.* at ART. II.

⁵¹ *Id.* at ART. V, VII.

⁵² *Id.* at ART. IX. Member States to the BWC could not agree on a means of international supervision for any proposed inclusion of a ban on chemical weapons proliferation. Article XII similarly calls for States to reconvene to discuss proposed bans to chemical weapons proliferation within five (5) years of this BWC. *Id.* at ART. XII.

⁵³ JONATHAN TUCKER, *The Biological Weapons Convention (BWC) Compliance Protocol Issue Brief*, Center for Nonproliferation Studies, August 2001 available at <http://www.nti.org> (last accessed Nov. 30, 2009).

⁵⁴ BWC, APR. 10, 1972, *supra* note 48 at ART. VI.

⁵⁵ TUCKER, *supra* note 53.

⁵⁶ *Id.*

⁵⁷ *Id.*

The Ad Hoc Group drafted a Protocol to the BWC which contained certain essential components to ensure greater compliance with the original BWC. These included declarations of existing stockpiles of biological toxins that may have dual usage (both peaceful and harmful), routine visits to these declared facilities without specific evidence of proliferation, and short-notice challenge investigations to allegedly noncompliant facilities.⁵⁸

These three elements had distinct goals which would make proliferation (and certainly use) of biological toxins as weapons increasingly difficult. The first element is notice; that is, notice to the global community that a particular State carries these toxins. Member States will then be able to turn their attention to these States as a sort of global “watchdog,” and similarly can place pressure on these States to reduce stockpiles. The second element is deterrence. Facilities that declare their stockpiles will be on notice that there is an upcoming inspection and will be less likely to engage in violations of the BWC.⁵⁹ The final element is a method of enforcement. The short-notice challenge investigation would serve the purpose of allowing violating States from attempting to hurriedly cease their operations to conceal their negative intent. While the Ad Hoc Group’s proposals of ensuring compliance may seem effective, it does appear that there is one key pitfall to the entire scheme: the first element requires member States to declare. If the member States never declare, then it is likely the other two elements will not follow, and ensuring compliance may not become a reality.⁶⁰

Nevertheless, the Ad Hoc Group submitted its proposed methods of achieving compliance with the BWC for approval at the BWC Protocol talks in July 2001. The United States was one of the most stringent objectors to the methods of achieving compliance that the

⁵⁸ *Id.*

⁵⁹ The protocol also calls for random inspections. *See infra*, note 75.

⁶⁰ Assistant Secretary Sheaks recognized this, stating it was an “analytical certainty” that offending States would conceal their illegal acts. JENNI RISSANENI, *BWC Update*, 57 DISARMAMENT DIPLOMACY May 2001 available at <http://www.acronym.co.uk/> (last accessed Nov. 30, 2009).

Ad Hoc Group proposed.⁶¹ Ambassador Donald Mahley, the head of the United States Ad Hoc Group Delegation, expressed concerns about the proposed protocol preventing the United States' legitimate commercial interests while simultaneously being unable to discover actual violators of the BWC.⁶² Following the United States' rejection of the protocol, other States were not motivated to move forward and no further proposal conferences were scheduled.⁶³ Still, Ambassador Mahley advocated the United States' opposition, stating that the means of ensuring compliance would be achieved through recognizing a "code of ethics", an idea which would engage the Australia Group.⁶⁴

The United States' rejection of the protocol is troublesome at best. Ambassador Mahley's idea of engaging the Australia Group does not address the danger of biological weapons proliferation. First, the Australia Group is, as its own website states, "an informal arrangement."⁶⁵ Such a loose arrangement inherently would never have the binding power necessary to enforce any measures upon member States as it is not a multilateral agreement.⁶⁶ Furthermore, the list of members of the Australia Group is comparatively short than those to the BWC.⁶⁷ The Australia Group's aims are proper, i.e., it seeks to minimize the risk of weapon proliferation, but while this might be a reflection of a universal sentiment of customary

⁶¹ REBECCA WHITEHAIR & SETH BRUGGER, *BWC Protocol Talks in Geneva Collapse Following U.S. Rejection*, Sept. 2001 available at <http://www.armscontrol.org> (last accessed Nov. 30, 2009).

⁶² *Id.* The Ambassador also was also quoted as saying the proposed protocol did not "provide sufficient protection" to United States biodefense programs and would allow a proliferator to continue violations with impunity. *Id.*

⁶³ *Id.*

⁶⁴ *Id.* The Australia Group is an informal arrangement which aims to allow exporting or transshipping countries to minimize the risk of assisting chemical and biological weapon (CBW) proliferation. THE AUSTRALIA GROUP, *Introduction*, 2007 available at <http://www.theaustraliagroup.net> (last accessed Nov. 30, 2009). Ambassador Mahley criticized the proposed protocol to the BWC as undermining international export control organizations such as the Australia Group. WHITEHAIR & BRUGGER, *supra* note 61.

⁶⁵ THE AUSTRALIA GROUP, *supra* text accompanying note 64.

⁶⁶ GRAHAM S. PEARSON ET AL., *The U.S. Rejection of the Composite Protocol: A Huge Mistake on Illogical Assessment*, 22 UNIV. OF BRADFORD DEPT. OF PEACE STUDIES Eval. Paper ¶ 29 at 16 (August 2001) available at <http://www.brad.ac.uk> (last accessed November 30, 2009).

⁶⁷ The Australia Group contains forty-one (41) member States, while the BWC has 163 member States. THE AUSTRALIA GROUP, *Australia Group Participants*, *supra* text accompanying note 64.

international law, it fails to involve those at-risk States with questionable human rights records – i.e., those States at higher risk for proliferating and employing such weapons.⁶⁸ To achieve a standard that has global character, it is important to involve members of the global community; only then can an agreement truly be said to be an expression of peremptory norms.⁶⁹ Finally, enforcing compliance may be easier with more States involved. Indeed, doing so would likely restore legitimacy to the process.

The United States, through Ambassador Mahley did note in 1994 that any changes to the BWC in a future protocol should be “legally binding” among other things.⁷⁰ Yet, in 2001, the United States rejected a proposed protocol which essentially contained many of the elements the United States previously had proposed, including the binding character of the protocol. Ambassador Mahley also commented on the possibility of the protocol being underinclusive and failing to deter non-State actor-proliferators.⁷¹ If the BWC protocol was successful, it most certainly would have addressed those rogue non-State actors, such as terrorist organizations, that would have attempted to violate the convention. Key to any international agreement is implementing legislation, and these rules would have enforced non-State actors’ compliance in the *intranational* context.⁷² Taking it one step further, the protocol spoke not only to punishing offending non-State actors, but also promoted infrastructural development to the tune of preventing non-State actor access to dangerous biological toxins.⁷³ Assistant Secretary of State

⁶⁸ The Australia Group is comprised almost entirely of Western States, save Japan and South Korea. *Id.*

⁶⁹ PEARSON ET AL., *supra* note 66, ¶ 17 at 9.

⁷⁰ UNITED NATIONS, *Special Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction*, Part IV 88, 89, September 19 – 30, 1994. Ambassador Mahley interestingly stated that the United States suggested not only that any proposed protocol be legally binding on member States, but also that such a protocol include declarations of existing stockpiles and routine facility visits. This differs little from the proposal of the Ad Hoc Committee submitted seven years later.

⁷¹ PEARSON, ET AL., *supra* note 66, ¶ 48 at 26. *See infra*, Section V(B) for a brief discussion of non-State actors.

⁷² *Id.* ¶ 49 at 26.

⁷³ *Id.*

for Verification Owen Sheaks addressed the verification issue inherent in the original BWC, remarking that the protocol failed account for the ability of any verification modules to discover proliferation or use of biological weaponry when the production of such was small-scale and unremarkable.⁷⁴ Yet, the United States failed to recognize that verification scheme would call for *mandatory* declaration of existing biological weapon stockpiles and would be reinforced with “randomly-selected transparency visits” routinely.⁷⁵

The United States’ position has been met with sharp criticism, both nationally and internationally. Critics are quick to point out that the United States is taking the exact opposite position that it took in 1994.⁷⁶ The United States’ argument that the limitations on proliferation would most likely affect those States that would be unlikely to engage in proliferation is a blind statement in this global society. One crucial goal of the protocol was to affect the safety of all States from those that might intend to use biological weapons. No more are there “remote corners of the world”; biological weapons can reach every State, thus the need for a global umbrella as the BWC protocol. Critics of the United States’ position have stated that the primary intent of the protocol to the BWC was to achieve transparency and build confidence between member States.⁷⁷ The collective security of all States is the goal of the BWC protocol, and this can only be achieved through memorializing this intent, and reinforcing it with strong, implementing legislation.⁷⁸

⁷⁴ RISSANEN, *supra* text accompanying note 60.

⁷⁵ PEARSON ET AL., *supra* note 66, ¶ 83 at 40. A note on “random routine.” Deterrence in proliferation would be achieved because a State could always expect an inspection (the routine), but it would never know when the inspection would actually occur (the random). This “random routine” would compel State compliance, because it could never commence proliferation without the risk of being discovered.

⁷⁶ *Id.* ¶ 50 at 27.

⁷⁷ *Id.* ¶ 48 at 26.

⁷⁸ *Id.*

B. The Convention on Certain Conventional Weapons (CCW) of 1980

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 (hereinafter CCW) is a comprehensive, albeit general agreement which includes restrictions on using conventional weapons without citing any particular weapons. The weapons it proposed to ban were those that could “cause superfluous injury or unnecessary suffering.”⁷⁹ However, it does also prohibit proliferation of these weapons.⁸⁰ Article VIII contains the pertinent clause of allowing member States to expand the prohibition of conventional weapons to specific weapons designated in any annexed protocols.⁸¹ The CCW is arguably the first international agreement attempting to ban the use of chemical weapons, specifically because Protocol III to the CCW prohibits the use of incendiary weapons.⁸² Protocol III describes what qualifies as an incendiary weapon and distinctly points out that munitions with incidental incendiary effects, such as illuminants, tracers, smoke, or other signaling systems are not “incendiary” under the definition.⁸³ Article 2 of Protocol III expressly prohibits using incendiary weapons against civilians or civilian objects.⁸⁴ Incendiary weapons may also not be utilized against military objectives that are within a concentration of civilians (but not civilian objects), unless the target is far-removed from the civilians, is non-air delivered, and precautionary measures are exercised

⁷⁹ CONVENTION ON PROHIBITIONS OR RESTRICTIONS ON THE USE OF CERTAIN CONVENTIONAL WHICH MAY BE DEEMED TO BE EXCESSIVELY INJURIOUS OR TO HAVE INDISCRIMINATE EFFECTS, Oct. 10, 1980.

⁸⁰ *Id.*

⁸¹ *Id.* at Art. 8.

⁸² Incendiary weapons refers to “any weapon or munition which is primarily designed to set fire to objects or to cause burn injury through the action of flame, heat, or combination thereof, produced by a chemical reaction of a substance delivered on the target.” PROTOCOL ON THE PROHIBITIONS OR RESTRICTIONS ON THE USE OF INCENDIARY WEAPONS (PROTOCOL III), ART. 1, §1, Oct. 10, 1980. It is only arguably a ban on a chemical weapon because there are circles that do not regard incendiary weapons as chemical weapons. *See US Used White Phosphorus in Iraq*, BBC NEWS, Nov. 16, 2005 available at <http://news.bbc.co.uk> (last accessed Nov. 30, 2009) (quoting LTC Barry Veneble as stating that incendiary weapons are not chemical weapons).

⁸³ *Id.* at ART. 1, §1(b)(i). Section 1(b)(ii) also disqualifies explosive or blast weapons with incidental incendiary character, designed not to burn people, but to destroy or otherwise damage military objectives such as armored vehicles and aircraft.

⁸⁴ *Id.* at ART. 2, §1.

in order to minimize incidental loss of civilian life.⁸⁵ Finally, Protocol III prohibits using incendiary weapons on any foliage, except where such use is meant to conceal or camouflage the movement of combatants or military objectives.⁸⁶

The United States was party to the CCW and Protocols I and II but did not ratify until 1995 following a reservation.⁸⁷ Readily apparent was the United States' refusal to adopt Protocol III to the CCW. It was not until January 21, 2009 that the United States finally adopted Protocol III of the CCW with the reservation that

“The United States of America, with reference to Article 2, paragraphs 2 and 3, *reserves the right to use incendiary weapons against military objectives located in concentrations of civilians* where it is judged that such use would cause fewer casualties and/or less collateral damage than alternative weapons, but in so doing will take all feasible precautions with a view to limiting the incendiary effects to the military objective and to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects.”⁸⁸ (emphasis added).

Prior to adopting Protocol III with the express reservation in 2009, the United States was accused of and has confirmed use of incendiary weapons near, if not over, civilian populations.⁸⁹ The United States did initially state that this use of the incendiary weapon, white phosphorus over Fallujah, Iraq in 2004, was for purposes the CCW did not proscribe (i.e., smokescreen), however, this position was abandoned as a Pentagon spokesperson revealed that white

⁸⁵ *Id.* at ART. 2, §2, 3.

⁸⁶ *Id.* at ART. 2, §4.

⁸⁷ Protocols I and II (Protocol on Non-Detectable Fragments and Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps, and other Devices, respectively) are not discussed here.

⁸⁸ PROTOCOL ON THE PROHIBITIONS OR RESTRICTIONS ON THE USE OF INCENDIARY WEAPONS (PROTOCOL III), United States of America Reservation / Declaration Text, Jan. 21, 2009.

⁸⁹ The March 2005 edition of the United States Army Field Artillery Magazine revealed that the United States had used white phosphorus as an effective psychological weapon to flush insurgents out of trench lines and spider holes. This publication served as the whistleblower which compelled the Department of Defense to change its position.

phosphorus was used “against enemy combatants.”⁹⁰ Critics of the United States argued that this was highly contrary to customary international law and internal military policy.⁹¹

It is unfathomable that the United States would stand as an advocate of reducing use and proliferation of such weapons, while simultaneously using it and attempting to justify its actions because the targets were “insurgents” and that incendiary weapons are not strictly “chemical weapons” as proscribed under the 1993 Chemical Weapons Convention. Even more problematic is that the United States abandoned internal military policy, as expressly cited in the Command & General Staff Handbook. This particular handbook was not meant to be a recommendation or suggestion of what may constitute war-time policy; this is the handbook that is utilized in order to instruct rising general officers of military doctrine.⁹² The United States also attempted to steer away international pressure of its use of white phosphorus in Fallujah in 2004, despite being a non-party to Protocol III of the CCW, knowing full-well the consequences; the manner in which the truth came to light, however, was much less-than-flattering.⁹³

⁹⁰ See JOSEPH TESSIER, *Shake & Bake: Dual-Use Chemicals, Contexts, and the Illegality of American White Phosphorus Attacks in Iraq*, 6 PIERCE L. REV. 323, 340 n.106 (2007-2008). (citing members of the Russian Parliament, Venezuelan President Hugo Chavez, and Cuban President Fidel Castro as critical of the United States’ violation of international law).

⁹¹ INTERNATIONAL PEACE BUREAU, *IPB Appeal on White Phosphorus Use by U.S. Military in Iraq*, Dec. 20, 2005 available at <http://www.ipb.org> (last accessed Nov. 30, 2009). See also UNITED STATES ARMY COMMAND & GENERAL STAFF COLLEGE, ST 100-3 Battle Book, §5-11(b)(4), July 1999 (stating “[i]t is against the law of land warfare to employ WP against personnel targets”).

⁹² See About CGSC available at <http://www.usacac.army.mil> (last accessed Nov. 30, 2009). The Command & General Staff College is a United States Army joint leadership course for the most senior-ranked officers – those that would likely be charged with the decision of what munitions to employ in what situation.

⁹³ GEORGE MONBIOT, *The US used Chemical Weapons in Iraq – and then Lied about It*, GUARDIAN.CO.UK, Nov. 15, 2005 available at <http://www.guardian.co.uk> (last accessed Nov. 30, 2009). Following the Department of Defense’s admission, the United States’ use of chemical and incendiary weapons in Iraq, including napalm, came under increased scrutiny.

The United States' stance that white phosphorus does not qualify as a chemical weapon is quite possibly one of the most debilitating blows to American credibility in their pursuit of non-proliferation. In a formerly classified report submitted in 1995, the Pentagon wrote⁹⁴:

“In late February 1991, following the Coalition Forces' overwhelming victory over Iraq, Kurdish rebels stepped up their struggle against Iraqi Forces in Northern Iraq. During the brutal crackdown that followed the Kurdish uprising, Iraqi forces loyal to President Saddam (Hussein) may have possibly used white phosphorus (WP) *chemical weapons* against Kurdish rebels and the populace of Erbil ...” (emphasis added).

This is simply astounding. Enemies using white phosphorus against combatants and civilians are guilty of employing chemical weapons, whereas the United States, in the same context, is not culpable for the use of chemical weapons. The United States seems to have an unfortunate double standard in this particular context, and its use of white phosphorus, in violation of international norms, seems to be most damaging to its reputation abroad.

Perhaps in recognition to this and with the intent to restore American credibility in foreign circles, President Barack Obama encouraged the adoption of Protocol III of the CCW. It is a significant step towards the State paying tribute to customary international law and weapons non-proliferation. The United States' actions during the Fallujah campaign of 2004 would have been a clear violation of international law under this Protocol, in addition to American military policy; the combination of which may have been enough of a deterrent for the military to have chosen an alternative means to wage the battle.⁹⁵

Yet, the Obama Administration has chosen to reserve the right to use incendiary weapons where it is expeditious to achieving military objectives upon a balancing of certain factors. The

⁹⁴ IIR 2 243 1050 91/POSSIBLE USE OF PHOSPHOROUS CHEMICAL available at <http://www.gulflink.osd.mil> (last accessed Nov. 30, 2009).

⁹⁵ While it is not expressly stated, the United State' use of white phosphorus in Fallujah allegedly harmed civilians and civilian infrastructure – an allegation that could have been avoided if perhaps if Protocol III were in force at the time and this act were deterred. See JOHN DANIZEWSKI & MARK MAZZETTI, *White Phosphorus Use Ignites Debate: Critics Say the U.S. Killed Iraqi Civilians with the Incendiary Weapon. The Pentagon Denies It*. L.A. TIMES, Nov. 28, 2005 at A1 (recounting the story of Omar Abdullah, who witnessed first-hand white phosphorus burns on civilian corpses in Fallujah).

American standard for the use of incendiary weapons is “[w]here it is judged that such use would cause fewer casualties and/or less collateral damage than alternative weapons ...” and in light of taking all “feasible precautions” to prevent any incidental loss of civilian life.⁹⁶ One arguments opponents may have to this reservation is that incendiary weapons, like white phosphorus, are chemical weapons, and therefore are banned by the Chemical Weapons Convention of 1993. The heart of the argument is that the actual use of the weapon is dispositive of its legality, versus any legitimate purpose it may incidentally have.⁹⁷ And too, the toxicity of the weapon plays an important role in determining not only its lethality, but also its legality. If white phosphorus is determined to fall under the purview of any of the Schedules of the Chemical Weapon Convention, then it may lose its protection as a weapon with a legitimate use. Said another way, the legitimate use of white phosphorus as a smokescreen or illuminating tool would be immaterial when balanced against the potential harms inherent to the chemical, as the Chemical Weapons Convention contemplates the risk of these harms. The Chemical Weapons Convention is examined next.

C. The Chemical Weapons Convention (CWC) of 1993

The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (hereinafter CWC) is one of the most modern agreements outlawing use and proliferation of chemical weapons.⁹⁸ The United States entered this agreement into force in 1997, with the reservation that verification samples collected would only be tested in American laboratories.⁹⁹ It explicitly prohibits the development, production, and stockpiling and use of chemical weapons and defines what specific weapons fall under its

⁹⁶ RESERVATION, *supra* note 88.

⁹⁷ TESSIER, *supra* note 90 at 361.

⁹⁸ CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION, STOCKPILING AND USE OF CHEMICAL WEAPONS AND ON THEIR DESTRUCTION, Jan. 13, 1993.

⁹⁹ CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION, STOCKPILING AND USE OF CHEMICAL WEAPONS AND ON THEIR DESTRUCTION, United States of America Reservation / Declaration Text, Apr. 25, 1997.

purview.¹⁰⁰ Article 1 outlines general obligations to never use, acquire, or retain chemical weapons, and to destroy any chemical weapons currently owned or possessed.¹⁰¹ Article 2 defines chemical weapons as those toxic chemicals, munitions, and devices specifically designed to cause death or other harm through the toxic properties of such chemicals and their precursors, or any equipment designed to deploy toxic chemicals, as defined in Article 3.¹⁰² A toxic chemical is a chemical, regardless of its method of production or origin that can cause death, temporary incapacitation or permanent harm to humans or animals.¹⁰³ To be comprehensive, the CWC includes a provision which outlaws the use of chemical precursors in munitions, or those elements that are involved in the production of the toxic chemical, or those chemicals that give the chemical its toxicity.¹⁰⁴ Section 9 of Article 2 explains permitted usages of toxic chemicals.¹⁰⁵ The CWC also contains robust resolutions that promote general confidence in the convention, requiring declaration (within thirty (30) days of ratifying the CWC) of all chemical toxins, precursors, and munitions, by category (see next paragraph); initiating routine on-site inspection to verify declarations and ensure continued compliance with obligations of the CWC (i.e., destruction of stockpiled chemical agents) and challenge inspections to determine culpability of suspected States; and enforcing compliance with proposed punitive measures before the U.N. Security Council or suspension of CWC privileges, including voting and trading rights.¹⁰⁶

¹⁰⁰ CWC, *supra* note 98 at Preamble.

¹⁰¹ *Id.* at ART. 1.

¹⁰² *Id.* at ART. 2 §1(a – c).

¹⁰³ *Id.* at ART. 2 §(2).

¹⁰⁴ *Id.* at ART. 2 §§ 3, 4.

¹⁰⁵ *Id.* at ART. 2 §9. These include agricultural, medical, pharmaceutical, industrial, research, or other peaceful purposes; protective purposes (i.e., combating toxicity of chemicals), law enforcement including domestic riot purposes, and military purposes not dependent on the toxic character of the chemical as a method of warfare. The latter is discussed as a legal defense to the United States' use of white phosphorus in Section IV, *infra*.

¹⁰⁶ DARYL KIMBALL & OLIVER MEIER, *The Chemical Weapons Convention (CWC) at a Glance*, March 2008 available at www.armscontrol.org (last accessed Nov. 30, 2009).

The CWC determined that weapons should be “scheduled” – that it is to say, weapons are delineated into categories depending on their potential for legitimate use. Schedule 1 chemicals and precursors are considered to be with few legitimate, peaceful purposes; only small, limited quantities may be stockpiled as they are deemed “high-risk.”¹⁰⁷ Schedule 2 chemicals are toxic chemicals and precursors that pose a significant risk, but that are produced in small quantities for limited commercial and industrial use.¹⁰⁸ Schedule 3 chemicals are those chemicals which pose a risk but also have legitimate uses to be produced on a larger scale.¹⁰⁹ The CWC also poses limiting the use of those chemicals that are toxic, but not enough to be scheduled.¹¹⁰

The CWC, along with defining which chemicals should be scheduled also contains detailed provisions on destroying munitions according to a timetable. Article 4 states that a State must begin destruction of chemical weapons, as defined, within two (2) years of ratifying the CWC.¹¹¹ Member States must conduct this order of destruction according to the scheduling provided in the Annexes and must complete this project no later than ten (10) years from the date the CWC is entered into force.¹¹² The specifics of the order of destruction is outlined in Table 1 below¹¹³:

¹⁰⁷ CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION, STOCKPILING AND USE OF CHEMICAL WEAPONS AND ON THEIR DESTRUCTION, Annex A, §A(1). An example of a Schedule 1 chemical is sarin, which has immediate toxic effects when released in the atmosphere and a certain lethality at higher doses. CENTER FOR DISEASE CONTROL, *Facts about Sarin*, May 17, 2004 available at <http://emergency.cdc.gov> (last accessed Nov. 30, 2009).

¹⁰⁸ *Id.* at Annex A, §A(2). An example of a Schedule 2 chemical is phosgene, which has multiple modalities (airborne, water-borne, food-borne) and can cause difficulty breathing and even heart failure at higher dosages. CENTER FOR DISEASE CONTROL, *Facts about Phosgene*, Feb. 7, 2005 available at <http://emergency.cdc.gov> (last accessed Nov. 30, 2009).

¹⁰⁹ *Id.* at Annex A §A(3). Member States actually have stockpiles of Schedule 3 chemical weapons. Hydrogen cyanide is an example of a carcinogenic, cardiopulmonary depressant that can cause death when exposed to large dosages of the gas in enclosed spaces. CENTER FOR DISEASE CONTROL, *Facts about Cyanide*, Feb. 7, 2005 available at <http://emergency.cdc.gov> (last accessed Nov. 30, 2009)

¹¹⁰ *Id.*

¹¹¹ CWC, Jan. 13, 1993, *supra* note 98 at Art. 4 §6.

¹¹² *Id.*

¹¹³ CWC, *supra* note 98 at Verification Annex, Part IV §C(17)(a – c). It may not be immediately pertinent as to how a timetable for chemical non-proliferation is representative of American compliance, to be analyzed below in this

Schedule	Phase 1	Phase 2	Phase 3	Phase 4
1	- Within 2 years, test destruction facility - 3 years – 1%*	- 5 years – 20%	- 7 years – 45%	- 10 years – 100%
2	- Begin destruction within 1 year	- 5 years – 100% (equal increments throughout)		
3	- Begin destruction within 1 year	- 5 years – 100% (equal increments throughout)		

Table 1

*Percentages represent amount of that scheduled chemical weapon that must be destroyed in the allotted time cited.

Having ratified the CWC and its Annexes in 1997, the United States had until April 2007 to complete Phase 4 of the destruction of Schedule 1 chemical weapons. However, this clearly did not occur. Still, the United States has made significant progress up till this date. As of May 2006, according to the United States Army Chemical Materials Agency, 36.5% of its declared chemical inventory had been destroyed.¹¹⁴ The United States did complete destruction of all Schedule 3 chemical weapons in a timely fashion and met the Phase 2 deadline for Schedule 1.¹¹⁵ However, the pace of destruction slowed due mainly to lack of funding (as money was diverted to sustain two wars on two different fronts), legal, and technical issues.¹¹⁶ Progress, while slow, has not been stagnant; as of 2009, an estimated 66% of the declared inventory had been destroyed.¹¹⁷ Despite even this significant progress, conservative estimates do not see the United States in

section. Stated as such, it becomes somewhat more intuitive – whether the State has met the timetable prescribed in the CWC will be the measure of its compliance.

¹¹⁴ U.S. ARMY CMA, *Army Releases Updated Chemical Weapons Destruction Schedule Estimates Go Beyond Extended 2012 Treaty Deadline*, May 9, 2006 available at <http://www.csepp.net> (last accessed Nov. 30, 2009).

¹¹⁵ *Id.*

¹¹⁶ JONATHAN B. TUCKER & PAUL F. WALKER, *Getting Chemical Weapons Destruction back on Track*, Bulletin of the Atomic Scientists, Apr. 27, 2009 available at <http://www.thebulletin.org> (last accessed Nov. 30, 2009). See *infra* note 117 for an example of legal challenges to non-proliferation.

¹¹⁷ GREG MAHALL, *Oregon Judge Rules for Army in Incineration Lawsuit*, Nov. 5, 2009 available at <http://www.army.mil/-news/2009> (last accessed Nov. 30, 2009). The Army is the principle agency responsible for the destruction of chemical weapons at four remaining sites: Alabama, Arkansas, Oregon, and Utah. In Hermiston, Oregon, petitioners challenged the state's temporary authorization request granting the Army and other agencies to trial-burn mustard agents, which would elevate atmospheric levels of mercury. Petitioners asserted that this was in violation of hazardous waste laws and the Clean Air Act. Judge Marcus, sitting on the Circuit Court for the State of Oregon, dismissed summary judgment.

compliance with the extended 2012 deadline.¹¹⁸ While legislation has been enacted to extend the deadline to 2017¹¹⁹, there is some doubt to United States' ability to meet this new deadline.¹²⁰ Further estimates place the United States' completion of nonproliferation as late as 2023.¹²¹

Technically speaking, the United States was not in compliance with the international standard of the CWC, prior to the parties agreeing to extend the deadline for it and other member States.¹²² This noncompliance is arguably benign to American credibility as other member States, particularly Russia, India, and Albania have also been tardy in meeting the 2007 deadline. Missing the 2012 deadline, which could very likely happen, would also not likely be fatal to the United States' credibility, but could demonstrate an unfortunate lack of dedication to the intent of the CWC.¹²³ In order to restore the United States' reputation and willingness to achieve proliferation, particularly following the damage done to American credibility during the Bush Administration, the United States must continue nonproliferation at a steady pace.¹²⁴ Some proposals include reducing munitions in-place, instead of transferring these to other sites which may or may not be functional in the future.¹²⁵ Also demonstrative of American commitment to the effort of nonproliferation would be if the United States paid its annual dues timely to the Organization for the Prohibition of Chemical Weapons; lack of funds would only undermine the operation of this organization with so important a function.¹²⁶

¹¹⁸ TUCKER & WALKER, *supra* note 116.

¹¹⁹ See 2008 DEFENSE APPROPRIATIONS ACT, Pub. L. No. 110-116, §8119(a), 121 Stat. 1295, 1340 (2007) available at <http://www.govtrack.us> (last accessed Nov. 30, 2009). Section 8119 states that the Department of Defense's lethal chemical agent munitions depots shall complete destruction of these agents "in no circumstances later than December 31, 2017."

¹²⁰ TUCKER & WALKER, *supra* note 116.

¹²¹ *Id.*

¹²² ORGANIZATION FOR THE PROHIBITION OF CHEMICAL WEAPONS, *Annual Chemical Weapons Convention Conference Concludes; Final Stockpile Destruction Deadlines Extended to 2010*, Dec. 11, 2006 available at <http://www.opcw.org> (last accessed Nov. 30, 2009).

¹²³ TUCKER & WALKER, *supra* note 116.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

IV. White Phosphorus Revisited

In light of the CWC, it is pertinent at this juncture to evaluate American compliance with the convention. As previously discussed, the United States did not ratify Protocol III of the CCW and therefore could not technically be bound by its terms.¹²⁷ The CWC does not explicitly ban, neither in its articles, nor its annexed schedules, the use of white phosphorus. Yet, controversy was sparked upon the revelation that the United States had indeed used white phosphorus in Fallujah in 2004.¹²⁸ Aside from the obvious illegal use of white phosphorus against civilians, the incendiary properties of white phosphorus are particularly painful, indiscriminate, and can be deadly.¹²⁹ Theories for including white phosphorus in the CCW state that since white phosphorus is incendiary, as defined in Protocol III, and is contrary to the purpose of that convention, i.e., that white phosphorus is excessively injurious and indiscriminate, it should fall under the prohibitions of the CCW. Similarly, the CWC prohibits the use of munitions specifically designed to cause harm through the toxic properties of the chemicals.¹³⁰

The Convention on Chemical Weapons Implementation Act (CWCIA) of 1998 also contains language that would render the United States' use of white phosphorus in 2004 as suspect, if not outright illegal. Unlawful acts listed under section 229 of the CWCIA are to “knowingly develop, produce, otherwise acquire, transfer, directly or indirectly, receive, stockpile, retain, own, possess, or use, or threaten to use, any chemical weapon ...”¹³¹ Exempt

¹²⁷ Critics would argue that this prohibition against the use of incendiary weapons, ratified by so many member States, represents international sentiment, and thus the United States would be liable under the theory of violating customary international law. *See* TESSIER, *supra* note 90 at 340. Subsequent ratification of Protocol III in 2009 might have rendered the United States liable if it was in force at the time, and evidence came to light that civilians had been deliberately or indiscriminately targeted.

¹²⁸ DANIZEWSKI & MAZZETTI, *supra* text accompanying note 95.

¹²⁹ CCW, Oct. 10, 1980, *supra* text accompanying note 82.

¹³⁰ CWC, Jan. 13, 1993, *supra* note 98.

¹³¹ CHEMICAL WEAPONS CONVENTION IMPLEMENTATION ACT OF 1998 §229(a)(1), Pub. L. No. 105-277, 112 Stat. 2681 (codified as amended at 22 U.S.C. §6701 (2006)).

from everything, save *use*, are military personnel so authorized or in times of emergency.¹³² Both the CWCIA and the CWC recognize that the use of chemical weapons against any person, outside permitted purposes, would be a violation of international law. Evaluating these permitted purposes quickly reveals that the United States' use of white phosphorus in 2004 does not fall under this protection. The CWC states that "military purposes not connected with the use of chemical weapons *and* not dependent on the use of the toxic properties of chemicals as a method of warfare" are permitted usages.¹³³ The CWCIA is substantially the same, stating that "[a]ny military purpose of the United States that is not connected with the use of a chemical weapon *or* that is not dependent on the use of the toxic or poisonous properties of the chemical weapon to cause death or harm."¹³⁴ (emphasis added).

Given this strictly prohibitive language, the United States would be hard-pressed, given the evidence against it, to serve an explanation justifying its actions as not illegal. First, the incendiary properties of white phosphorus give it an indiscriminate and excessively injurious character, which are arguably contrary to the intent of the CCW and perhaps even customary international law. Second, the United States' use of white phosphorus on civilian targets, while not intentional, is still inexcusable under the prohibitions of the CCW. Even if it is conceded that civilians were not attacked purposefully and that only insurgents were targeted, internal military policy prohibits the use of white phosphorus against any human beings. And if it is conceded that the United States was not party to the CCW, and therefore not bound by its provisions, the next step is to indict the United States under the CCW.¹³⁵

¹³² *Id.* at §229(b)(2)(A – B).

¹³³ CWC, Jan. 13, 1993, *supra* note 99 at Art. 2, §9(c).

¹³⁴ 22 U.S.C. §6701(8)(c). The "and" versus "or" distinction is significant, see below.

¹³⁵ The word "indict" is used here stylistically. Nothing in the CCW creates a formal cause of action against member States for violating its provisions.

The CCW prohibits the use of weapons whose toxic properties are responsible for causing harm or death. Evaluating white phosphorus under this standard removes any doubt: the active ingredient in white phosphorus is the phosphorus itself, which self-ignites in the presence of oxygen. Thus, in white phosphorus, phosphorus is the component responsible for its toxic properties. It is the flammable phosphorus that burns everything like a rain of fire when released as a cloud of smoke over a population.

To end the analysis, the United States cannot avail itself of the provision espousing unrelated military application. Under the CWC, the two clauses of the unrelated military application provision prevent the State from pursuing objectives that may be associated with use of chemical weapons. These objectives must also not have any relationship with the toxicity of any chemical weapons. Therefore, an example of permitted usage under the CWC would be military transportation of chemical weapons from one facility to another.¹³⁶

Defendants of the United States' actions may raise the argument that both clauses of the provision must be violated in order to nullify the protection. That is to say, the State must A) use the chemical weapon *and* B) use the weapon in such a way as to exploit its toxic properties. Under this argument, a State that uses white phosphorus for only illumination or smokescreen *may* raise a compelling defense.¹³⁷ The State may be pursuing a military objective through the *use* of chemical weapons, but this use would not be dependent on the *toxic* properties of white phosphorus. Therefore, the unrelated military application defense would inure since the provision's clauses are not *both* defeated.

¹³⁶ Here, both criterion are fulfilled, thus, the protection inures in the transportation example. This is significant because the CWC contains the conjunction "and" which requires satisfying *both* clauses before an act is deemed an unrelated military purpose.

¹³⁷ The other challenges, such the indiscriminate suffering that white phosphorus may inadvertently cause if unchecked, may still defeat this logic if this argument prevails.

There are two distinct rebuttals to this argument. First and less intuitive is the idea that the toxic properties of white phosphorus employed here, i.e., its volatility, *is* the means through which to pursue the military objective. The CWC states that the use must not be dependent on the use of the toxic properties of chemicals as a *method of warfare*. This analysis would be followed with what is considered a “method of warfare.”¹³⁸ Since illumination or concealment are accepted here as methods of warfare, both of which white phosphorus contributes to achieving, the second clause is defeated and the unrelated military protection is neutralized.

The second rebuttal centers around the dually-limiting language in the CWCIA.¹³⁹ First, the military objective must not be connected with the use of a chemical weapon. This is dispensed with; the chemical weapon white phosphorus was clearly used, and thus the United States is culpable. Verily, the analysis could end here. However, under the CWCIA definition of the unrelated military application, the United States is culpable also under the second clause of the provision, which allows use of chemical weapons only when its use is not dependent on its toxic or poisonous properties to cause death or harm. The United States’ use of white phosphorus in 2004 was intended to flush out insurgents from trenches and spider-holes; it invariably caused much harm to the enemy combatants. Neither the CWC nor the CWCIA make a distinction between the type of target. Simply put, human beings may never be targeted ever under the convention or the statute.

Had the United States actually only used white phosphorus as it initially indicated, i.e., for purposes of illumination and concealment, it is possible that it could have mustered a

¹³⁸ Appreciating that this analytical pathway opens more and more doors, it will be presumed conclusively that illumination and smokescreen constitute “methods of warfare.”

¹³⁹ The language again is that permitted uses include “[a]ny military purpose of the United States that is not connected with the use of a chemical weapon or that is not dependent on the use of the toxic or poisonous properties of the chemical weapon to cause death or harm.” 22 U.S.C. §6701(8)(c). This second rebuttal is the opposite argument to the one presented above; it basically states that with the “and” conjunction, a violation of only *one* clause removes the entire protection.

compelling legal argument justifying this use. Without the limitations of the CCW, coupled with the fact that the United States' use of white phosphorus, in this hypothetical, would not have been dependent on the "the use of the toxic or poisonous properties of the chemical weapon to *cause death or harm*," America could indeed be justified in its actions. Still, it would have to explain away the first clause of the unrelated military application provision in order fully prevail.¹⁴⁰

V. The Ethical Balancing Test

It seems somewhat absurd to attempt to justify what is universally considered unjustifiable. Attempting to explain, with legal surety, reasons and circumstances under which to use chemical or biological weapons is also admittedly difficult. To begin though, the litmus test here poses on one hand national security, and on the other, the security of the world. Deploying chemical or biological weapons would require balancing these apparently opposite factors, but while there is a compelling argument for national security, the peremptory norm emerging outlawing the use of these weapons may henceforth always tip the balance in the global favor. Still, the argument has some merit and should not be readily dismissed. Following an analysis of national security, the security of the world, as defined, shall be surveyed as a means of concluding truly which concern prevails.

A. National Security

National security is a hot-button term that focuses on member States' internal management of safety issues. Robert E. Ebel, quoting George Kennan, defined national security as "the continued ability of this country to pursue its internal life without serious interference."¹⁴¹ This is

¹⁴⁰ Likely this would lead the Supreme Court to either issue a ruling clarifying this statute, or perhaps it could be struck down entirely as constitutionally vague.

¹⁴¹ ROBERT E. EBEL, ENERGY AND NATIONAL SECURITY CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES DIRECTOR, Comments on the Economic and Security Implications of recent Developments in the World Oil Market,

not far from the truth; national security is not only a State's ability to conduct its internal affairs unfettered, but it also denotes State survival through a conglomeration of economic, military, and political interests.¹⁴²

The real question, given these complementary factors responsible for national security, is how this phenomenon is furthered through using chemical or biological weapons. One argument is the necessity defense, which refers to achieving military necessity using chemical or biological weapons.¹⁴³ Under certain circumstances, military necessity is permitted and even encouraged when faced with the dilemma to use such weapons. Example circumstances could include when using such weapons would be the only means of accomplishing the mission.¹⁴⁴ However, the Army has eschewed the necessity defenses under even these circumstances when the use of such weapons are prohibited by treaty.¹⁴⁵ That is, if a particular chemical or biological agent is expressly prohibited in an international agreement, the necessity defense would fail to exculpate the perpetrator.

The necessity defense is somewhat complex and should not be abandoned immediately. First, under United States federal common law, a necessity defense can be raised where the defendant was under an unlawful and imminent threat of such a nature as to produce a well-founded apprehension of serious bodily injury or death.¹⁴⁶ The defendant must not have placed himself in the position where it would be probable that he would be forced to choose criminal

Address before the U.S. Senate (Mar. 24, 2000) transcript *available at* <http://hsgac.senate.gov> (last accessed Nov. 30, 2009).

¹⁴² NATIONAL SECURITY ACT OF 1947 §108(b)(3), Pub. L. No. 235, 61 Stat. 496 (codified as amended in 50 U.S.C. 404a(b)(3) (2008)).

¹⁴³ TESSIER, *supra* note 90 at 327.

¹⁴⁴ *Id.*

¹⁴⁵ *Id. citing* INT'L OPERATIONAL LAW DEP'T, Judge Advocate General's Legal Ctr. & Sch., Law of War Handbook 164-65 (2005) *available at* <http://www.loc.gov> (last accessed Nov. 30, 2009).

¹⁴⁶ *U.S. v. Andrade-Rodriguez*, 531 F.3d 721, 732 (8th Cir. 2008).

conduct.¹⁴⁷ The defendant had no reasonable, legal alternative to violating the law.¹⁴⁸ A causal relationship must be established between the harm avoided and the criminal action taken.¹⁴⁹

Expanding this to the international context can be illustrated via hypothetical. (1) A platoon of weary American Soldiers may face imminent harm of catastrophic proportions from an advancing, well-equipped enemy company. (2) The platoon of American Soldiers executed a combat landing three days earlier and is low on supplies and ammunition. (3) The American platoon leader has two choices: fight with the limited ammunition remaining and face certain death or capture, or employ a chemical agent which will not only conceal the escape route for the Americans, but also severely incapacitate the enemy. Perhaps the agent will cause the enemy to choke on noxious fumes. (4) Deploying the weapon will clearly save the lives of the platoon leader and his Soldiers; not deploying the weapon will expose the platoon leader and his Soldiers to death to a near certainty.

Under such circumstances, a Soldier in the American platoon would hope that the chemical in his unit's depleted arsenal is not banned under any international agreements. The properties in the given hypothetical of this particular chemical agent are not well explained, but, as stated, would "severely incapacitate the enemy" through the spread of noxious fumes. It is likely that this weapon is banned, given its description and capabilities; in this case, the necessity defense would be rejected in an international tribunal trying the platoon leader for his decision to employ the weapon.

The necessity defense then, it appears, must be abandoned. This leaves a putrid taste in one's mouth; prohibiting the use of chemical weapons under such extreme circumstances undermines achieving the military objective, and the men and women who fight to do so. While

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* Specifically, the defendant would be unable to avoid both breaking the law or any ensuing harm.

¹⁴⁹ *Id.*

an exception may raise the eyebrow, perhaps under this limited circumstance, chemical or biological weapons should be permitted. However, if such an argument were actually raised, the backlash would be strong. The most crucial rebuttal centers on the slippery slope argument; while the above hypothetical purports a narrow circumstance, creating exceptions to an almost absolute rule will undercut its potency and universality. As is the result of the slippery slope, more and more circumstances will be imagined in order to fashion similar exceptions. Where there are legal questions on the use of chemical or biological weapons, fancy litigatory maneuvering will exploit these new loopholes to create favorable indiscretion.

If expressions of national security cannot and should not prevail in this extreme, war-time circumstance, it naturally follows that they will not be able to do so in a domestic context. For one thing, in a domestic context, the necessity defense would never rationalize proliferating chemical or biological weapons, as the first element of imminency is absent. While national security is an important State interest, it should never intervene against universal, peremptory prohibitions against chemical or biological weapons which otherwise serve no legitimate purpose.

B. Security of the World

Using and proliferating chemical weapons will countermand security interests of the world. The manifestations of this destabilization will not be merely physical, as the burn victims of Fallujah may relate. This is certainly a primary concern of the conventions, particularly the CCW which sought to eliminate excessively injurious weapons and those responsible for indiscriminate killing.¹⁵⁰ However, the implications of using chemical or biological weapons goes beyond simply the physical horrors the weapons create; they would most likely spawn a regionally destabilizing event in the form of an arms race.

¹⁵⁰ See CCW at Preamble, Jan. 10, 1972 *supra* text accompanying note 82.

Chemicals weapons were still being proliferated up till and after the CWC in 1993. In order to deter any nerve gas attacks on Europe, the United States began a chemical weapons arms race with the Soviet Union as late as 1987.¹⁵¹ The Department of Defense submitted several proposals to Congress to appropriate funds to pay for binary weapons.¹⁵² Despite Soviet assurances that no new chemical weapons were being created, the United States continued to stockpile these weapons, concerned that its own arsenal was small and outdated compared to the Soviets'.¹⁵³

Arms races are widely regarded as having destabilizing effect.¹⁵⁴ Iran's proliferation of nuclear energy has ignited global criticism and is said to be the primary factor which may spark a new arms race in the region.¹⁵⁵ There are four scenarios in arms races, according to political scientists.¹⁵⁶ These are mutual arms buildup, mutual arms reduction, single party buildup, and single party reduction.¹⁵⁷ Three out of four of these scenario include at least one party building up arms. Most often, a neighbor state will respond by building up its own arms.¹⁵⁸ Each State will continue to proliferate arms until both States reach a deadlock, at which point they stand at the brink of war in order to assert dominance.¹⁵⁹

There is no question that arms races are harmful to the security of the world. Single party buildup would represent an imbalance of military power, and as such, a State can wield its

¹⁵¹ GLENN GARELIK, *Toward a Nerve-Gas Arms Race*, TIME, Jan. 11, 1988 available at <http://www.time.com> (last accessed Nov. 30, 2009).

¹⁵² *Id.* Binary weapons carry two harmless chemical components that react upon impact and release their combined toxicity along with the punch of the explosion.

¹⁵³ *Id.*

¹⁵⁴ SEN. REP. NO. 110-34 at vii (2008).

¹⁵⁵ *Id.*

¹⁵⁶ S. PLOUS, *The Nuclear Arms Race: Prisoner's Dilemma or Perceptual Dilemma?* 30 J. PEACE RESEARCH 163 (1993).

¹⁵⁷ *Id.*

¹⁵⁸ This is the quintessential international dilemma. *Id.* Some scholars state that the international dilemma can only end in war. JOHN C. LAMBELET, *Do Arms Races Lead to War?* 12 J. OF PEACE RESEARCH 123 (1975) citing L.F. RICHARDSON, *Arms and Insecurity* (1960).

¹⁵⁹ LAMBELET, *supra* text accompanying note 158.

imperialistic sword to the detriment of its neighbors. Mutual buildup is possibly worse, as two rival States would jockey for supremacy, neither attaining it and both awaiting the other's response with baited breath. It would be a Cold War all over again. A close modern-day equivalent is India and Pakistan; the former has begun testing nuclear technology in its submarines.¹⁶⁰ As such, the latter feels compelled to do the same in order to protect its sovereignty from a self-perceived foreign threat.¹⁶¹ Proliferation of chemical and biological weapons would likely spark additional such arms races, further destabilizing already precarious regions. Regional stability is crucial to the security interest of the world, particularly during a time when no States' fate is assured, and the distinctions between superpowers are fading. The biological and chemical weapons conventions seek to achieve this harmony.

Other than regional stability, the security of the world also depends upon maintaining the moral high grounds. While the United States has lost much credibility in the recent years, ratifying international agreements demonstrates an intent to restore what has been lost. But maintaining this ethical superiority is important for another reason – to avoid the temptation to resort to using biological or chemical weapons against non-State actors, or in retaliation. If moral superiority fails, the CWC does contain provisions which deliberately limit non-State actor access to chemical weapons with stringent controls.¹⁶² This is a useful provision because it will prevent chemical weapons from falling into the hands of deranged non-State organizations that may seek to deploy these weapons on civilian populations. Another provision is the State monitoring those residing within their territories to ensure compliance with the convention and its exclusive ownership of any chemical weapons. Finally, measures imposing penal and other

¹⁶⁰ SHAMIN UR RAHMAN, *India's Nuclear Submarine Triggers Arms Race: Pak Navy*, DAWN.COM, Jul. 27, 2009 available at <http://www.dawn.com> (last accessed Nov. 30, 2009).

¹⁶¹ *Id.* Pakistani Naval Commander stated that the India's nuclear submarine would have destabilizing effects on the region.

¹⁶² CWC, Jan. 13, 1993, *supra* note 98 at Verification Annex, Art. VI §C(6).

penalties on non-State actors (and State actors that fail to ensure compliance of those residing in their jurisdictions) will always contribute to preventing any situation that might arise where chemical weapons would have to be used. If non-State actors are not using chemical weapons against States, then States will be more disinclined to use chemical weapons against these actors.

VI. Conclusion

The theme throughout this paper has been one that recognizes the interests of the global community over that of any one member State. This is not the most novel conclusion, and neither is the fact that United States must cease use and proliferation of all chemical and biological weapons – and it has, for the most part. Progress in reducing its stockpiles has been slow, but steady. However, what is somewhat radical is the idea that the United States is a violator of a rule of customary international law and modern treaty provisions. It may be easier to simply dismiss the Fallujah attacks as an isolated incident, but history has shown that this conclusion would be utter folly. Increased vigilance from the national and international community *will* demand compliance with convention obligations, particularly as the United States mires itself in more and more conflicts abroad. The United States should strive to maintain the highest standard of human rights recognition, lest its international credibility be completely compromised. To affect this end, the United States must continue to destroy chemical and biological weapon stockpiles, never again use these or any other banned weapons, encourage multilateral discourse with States undergoing similar challenges, and reinforce legitimacy in the conventions through funding and support. If these means are pursued, then any emerging allegations of illegal weapon use can be rejected outright, but this time as a statement of truth.¹⁶³

¹⁶³ JON BOONE, *Phosphorus Claim after Fatal Air Strikes in Afghanistan*, GUARDIAN.CO.UK, May 11, 2009 available at <http://www.guardian.co.uk/> (last accessed Nov. 30, 2009).