

No Retaliation in Kind: Japanese Chemical Warfare Policy in World War II

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Abstract This essay examines Japan's Chemical Warfare (CW) policy in World War II as revealed in interrogations of high-ranking military officers conducted by United States military intelligence after the war. Based upon these interrogations and an examination of recorded incidents of chemical weapons use, it may be concluded that Japanese CW policy permitted use of chemical weapons in China where the enemy did not possess the capacity to retaliate in kind, but largely prohibited their use in the Pacific against the Allies, whom they feared could respond in kind with overwhelming force. Thus, the threat of retaliation in kind served as a successful deterrent to CW employment in the Pacific Theater. For its part, the US refrained from using poison gas largely due to President Franklin D. Roosevelt's moral abhorrence of chemical weapons, but also because it was not in a position logistically to engage in CW on a large scale until late in the conflict, at which time the use of nuclear weapons made the issue moot.

From 1937 to 1945, the military services of Japan used chemical weapons on over 2000 occasions, primarily in the China Theater of Operations. In contrast, there were only a few occasions of use against Allied forces in the Pacific. The primary reason for this great disparity in incidents of use was Japan's fear of retaliation in kind. While engaged in combat against military forces in China, the Imperial Japanese Army used a variety of chemical weapons without concern of retaliation in kind by the technologically inferior Chinese military, which was utterly lacking in chemical weapons and whose soldiers often lacked even basic protective gear such as gas masks. In China, Japanese military forces often found themselves at a numerical disadvantage and used chemical warfare (CW) as a means to compensate. In most instances, the Japanese used tear gas and smoke candles, but there are numerous recorded incidents of more debilitating and lethal gases also being deployed. Combat in the Pacific Theater, however, was a different matter. Japanese military forces tended to use CW while on the offensive in open terrain, such as in

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China; but, when on the defensive in more restrictive environments, such as in close combat on the various Pacific islands against Allied forces, CW was not a viable option. More important was the fact that in the Pacific the Japanese were primarily up against the armed forces of the United States, which not only had the ability to respond in kind, but—it was thought—were backed by a national industrial capacity that could utterly annihilate Japan with chemical weapons should the Japanese initiate this type of warfare.

This essay examines Japan's CW policy in China and the Pacific Theater during World War II and argues that the perceived ability of the enemy to retaliate in kind was the primary factor in determining the use of chemical weapons by the Japanese. Legal prohibitions against using poison gases, such as those set forth in the Geneva Protocol of 1925, which Japan did not ratify in any case, were a secondary consideration (Robinson 1971, 289). Moreover, there was a significant disconnect between the stated official policy governing the use of chemical weapons and their actual employment upon the battlefield. Interrogations of high-ranking army officers, such as General Tojo Hideki,¹ conducted by US military intelligence after the war revealed that responsibility for approving use of lethal chemical weapons remained intentionally hazy, even though the actual chain of command was clear. This ambiguity in policy implementation served the interests of the top brass, who, after the war, attempted to avoid prosecution by exploiting the opacity of Japan's CW policy in China and the Pacific.

In Japan, military interest in chemical weapons originated with reports of the use of poison gas at Ypres on April 22, 1915. The Army Technology Review Board, which was responsible for monitoring innovations in weaponry, began to investigate the potential of developing an array of chemical weapons, poison gas launchers, and gas masks. One of the first Japanese scientists to pursue an interest in chemical weapons was Koizumi Chikahiko, a physician assigned to the School of Hygiene at the Army Medical College (*Rikugun Gun'i Gakkō*) who specialized in the study of industrial toxins. By the end of 1915, Koizumi emerged as the lead researcher in CW for the army and ultimately earned the moniker of "father of chemical warfare in Japan." In September 1917, the Army Medical College constructed a new Chemical Weapons Laboratory to support his research, and in the following year, Koizumi was named the laboratory's "Chief of Research on Protective Devices." He would go on to develop one of the first gas masks to be adopted for general use by the army (Tsuneishi 1984, 100–103; Tsuneishi and Asano 1982, 51–56). Research and development of chemical weapons was not given a high priority at this time, however, as Japan was not a principal belligerent in the war and lacked the relative urgency of the other participants. As a result, Japan's foray into chemical weapons developed more slowly than in Europe and the United States (Grunden 2005, 165–196; Murata et al. 1996, 16–31; Robinson 1971, 287–289).

¹Japanese names appear here with family name first and given name second, as is the custom in Japan.

Japan's CW program grew sporadically throughout the 1920s and 1930s. In April 1919, the Army Institute of Scientific Research (*Rikugun Kagaku Kenkyūjo*) was established as the central R&D facility of the Army Technical Headquarters (*Rikugun Gijutsu Honbu*), at which time it assumed jurisdiction over the army's CW program. In 1923, disaster struck. The Great Kantō Earthquake devastated much of Tokyo and leveled several buildings housing the army's R&D facilities for its CW program, including some on the campus of the Army Medical College and some belonging to the Army Institute of Scientific Research. The army exploited the disaster as an opportunity to upgrade its program, allocating a sum of ¥1.2 million for the construction of new laboratories. The Imperial Japanese Navy followed by initiating its own CW program that year at the Navy Technical Research Institute (Tsuneishi 1984, 102–105; Tanaka 1988, 11).² In the war that was to come, three military institutions would account for nearly all of the CW research being conducted in Japan: the Sixth Army Technical Institute under the Army Institute of Scientific Research, the Imperial Japanese Army Air Service's Third Laboratory, and the Imperial Japanese Navy's Sagami Naval Research Department (Robinson 1971, 287–289).³

In 1927, the army appropriated the island of Okunoshima and established its central chemical weapons production facility there. Located in the Inland Sea in Hiroshima prefecture, this small island, only four kilometers in circumference, provided secrecy and a measure of safety, being removed some three kilometers from the nearest city of Tadanoumi. In May 1929, the Okunoshima facility began production of tear and mustard gases, but would later produce an array of other lethal gases as well (Tanaka 1988, 12–14). At its peak capacity, Okunoshima produced some 200 tons of mustard gas (H), 50 tons of lewisite (L), 80 tons of diphenylcyanoarsine (DC), 50 tons of hydrocyanic (Prussic) acid (HCN), and 2.5 tons of chloroacetophenone (CN) per month.⁴

A Chemical Warfare School was established at Narashino, Chiba prefecture, in 1933, under the auspices of the Inspector General of Military Education, and served as the principal training facility for both the Imperial Japanese Army and Navy. According to a US military intelligence report, Narashino was “splendidly equipped, well staffed, and effective in the fulfillment of its mission until the end of the

²On the navy CW program, see General Headquarters, United States Army Forces, Pacific, Scientific and Technical Advisory Section, “Report on Scientific Intelligence Survey in Japan: September and October 1945,” November 1, 1945, vol. IV, Chemical Warfare, RG 457, Entry 9032, Box 765, US National Archives, College Park Md., pp. 19, 22, and appendices CW-3-1, CW-4-1, and CW-8-5. [Hereafter cited as GHQ, “Report on Scientific Intelligence Survey.”]

³Ibid., pp. 3, 39, 46–47, appendix CW-3-1.

⁴Ibid., p. 42, appendix CW-2-2, CW-6-1, and CW-6-2.

war,” and graduated 3074 officers between 1939 and 1945.⁵ The training of Japanese soldiers in defense against gas warfare was well organized and well executed, and all Japanese troops and a large number of reservists received CW training.⁶ One overall significant shortcoming of Japan’s CW program, however, was that no separate, independent chemical warfare division with oversight of all CW activities in the military services was ever established, which ultimately resulted in a “failure to develop an integrated, balanced and coordinated program.”⁷ As a result, the Japanese military forces never achieved more than “a limited tactical capability” with chemical weapons (Robinson 1971, 289).

As “the curtain opened” on the war in China with the Marco Polo Bridge Incident on July 7, 1937, so began Japan’s foray into chemical warfare (Murata et al. 1996, 10). The Japanese army began to use “gas” weapons against the Chinese almost immediately, with the first incident reported as early as July 18, 1937.⁸ Reports of Japanese use of smoke, tear gas, and poison gas steadily increased as the conflict in China dragged on and the war situation worsened (Yoshimi 2004, 49–68; Wakabayashi 1994, 3–8). Reports received through “official sources” stated there was “no proof that lethal or toxic chemicals were used prior to the fall of 1939.” However, “lethal gases definitely appeared in the summer of 1941,” though their use was “confined to restricted areas where the Chinese were exerting pressure,” and they were used in such cases “generally to support Japanese counter-attacks.”⁹ In the “Ichang Incident,” for example, a three-day battle that began on October 8, 1941, Japanese forces barraged the Chinese with gas shells for over four hours and dropped more than 300 gas-laden bombs on Chinese positions. An investigation conducted by a US Chemical Warfare Service (CWS) officer assigned to General Joseph Stillwell in the China-Burma-India Theater confirmed that mustard and CN gases had been used and that there was evidence suggesting lewisite may have been deployed as well. In this incident, there were 1600 confirmed casualties, 600 of which were killed in action as the result of Japan’s use of poison gases.¹⁰ During the war in China, Imperial Japanese Army forces are alleged to have used chemical

⁵Office of the Chief Chemical Officer, GHQ, AFPAC, Tokyo, Japan, “Intelligence Report on Japanese Chemical Warfare,” vol. I, “General Organization, Policies and Intentions, Tactics,” May 15, 1946, RG 319, Entry 82, Box 2097, File: “Japanese Chemical Warfare Policies and Intentions—US Army Forces, Pacific,” US National Archives, College Park, Md., p. 19. [Hereafter cited as Chief Chemical Officer, “Intelligence Report on Japanese Chemical Warfare.”].

⁶United States Military Intelligence Service, *Enemy Capabilities for Chemical Warfare*. Washington, DC: US War Department, 1943, 87–88.

⁷Chief Chemical Officer, “Intelligence Report on Japanese Chemical Warfare,” p. 21.

⁸*Ibid.*, p. 8.

⁹“Condensed Statement of Information Available Concerning Japanese Use of War Gas,” RG 319, Publications File, Entry 82, Box 2098, US National Archives, College Park, Md., p. 1. [Hereafter cited as “Condensed Statement.”].

¹⁰*Ibid.*, pp. 1–2.

weapons on as many as 2091 separate occasions, with estimates of casualties ranging from 36,968 to 80,000, including both military personnel and civilians.¹¹

In the aftermath of World War II, the United States Army Chief of Staff, together with Army Intelligence (G-2) and officers of the CWS, conducted a thorough investigation of Japanese activities in chemical warfare to assess Japan's capacity to wage large-scale war using chemical weapons and "to ascertain whether the Japanese possessed knowledge, techniques, materiel, or procedures superior to our own and worthy of adoption."¹² Because of the general order to destroy evidence upon Japan's surrender on August 15, 1945, documentation for the investigators was lacking (Drea et al. 2006, 9–11). As a result, interrogations of high-ranking military personnel served as one of the most important sources of information and played a key role in the investigation. Through the interrogations, US intelligence personnel attempted to discern what constituted chemical warfare policy within the Imperial Japanese Army and who was responsible for its implementation.

Among the first to be questioned was General Tojo Hideki, who had served as Vice-Minister of War from July to December 1938, and then as Minister of War from July 1940 to July 1944. He served concurrently as Prime Minister from October 17, 1941 to July 22, 1944. As such, he was in a position not only to have influenced the formation of CW policy, but to have overseen its implementation as well. Interrogated on April 2, 1946, just a few weeks before the International Military Tribunal for the Far East, or "Tokyo Trials," were to begin, Tojo was understandably very cagey with his answers. He admitted CW *research* was conducted in Japan, but emphasized that it was done only in a "defensive sense" and that "precautions" were taken "in the same spirit."¹³ He was adamant that the use of chemical weapons was forbidden because, had they been used, "it would have been disastrous for Japan." On this point, he articulated three specific reasons why he personally opposed the use of chemical weapons. First, it was against international law, which, he stated, "Japan had to follow." Secondly, he cited the industrial superiority of the United States. Finally, he stated that Japan is "an island country and if it were used, it would be very unfortunate for her." For these reasons, he stated, "I made a tremendous fuss about this and absolutely forbade its use, so I

¹¹The figures given for incidents of poison gas attacks range from 886 to 2091 separate occasions. See "Condensed Statement", p. 1; Awaya (1992, 3–6). Documentation of such numbers remains problematic even after the release of numerous seminal documents concerning Japanese CW in China. See Awaya and Yoshimi (1989), Drea et al. (2006).

¹²Chief Chemical Officer, "Intelligence Report on Japanese Chemical Warfare," p. 1.

¹³Geoffrey Marshall, Colonel, CWS, Chief Chemical Officer, General Headquarters, United States Army Forces, Pacific, Office of the Chief Chemical Officer, "Japanese Chemical Warfare Policies and Intentions," April 13, 1946, "Interrogation of General Hideki Tojo," conducted April 2, 1946, RG 319, Entry 85A, MIS#: 261223, US National Archives, College Park, Md., p. 1. [Hereafter cited as Marshall Interrogations.].

prohibited it, both from the standpoint of policy and strategy.” He added, “as War Minister, I had enough voice in this sphere to see that it was not used as a military policy.”¹⁴

When asked about specific orders being issued to field commanders concerning chemical weapons at the beginning of the war, he flatly stated, “During the time of the China Incident, it was forbidden and gas could not be used without my consent.” But his chief interrogator, Lieutenant Colonel John E. Beebe, Jr. of the US Chemical Warfare Service, persisted, knowing that chemical weapons had been used on numerous occasions in the China Theater. Tojo began to prevaricate and attempted to make a distinction between simple “harassing agents” such as smoke and tear gas and “casualty agents” such as poison gases that could be debilitating or fatal. Tojo argued that “casualty agents” were “absolutely forbidden,” but that harassing agents—those that result in coughing, sneezing, and tear production—were “used to a certain extent.” Tojo was adamant that he refused requests from the Supreme Commander in the China Theater to use casualty agents, though he did approve use of harassing agents.¹⁵

Beebe now had Tojo in a corner. He asked, “You mentioned earlier that Japan was obligated by international law and treaties not to use gas warfare. How, then, can you explain the use of harassing agents against the Chinese?” Tojo replied, “The police all over the world use tear gas and sneezing gas. They are used even in your country.” Beebe followed, “Was not the use of these harassing agents also prohibited by international law?” Tojo flatly stated, “In fact, they were in use by the police throughout the world. How about the atom bomb?”¹⁶ In this exchange, Beebe established that Japan did not adhere to any strict interpretation of international law concerning the use of chemical weapons and that Tojo himself had approved their use in the China Theater, though Tojo was adamant that he had approved only the use of harassing agents.

Next, Beebe interrogated General Kawabe Masakazu, who had an extensive service record in the China Theater. Kawabe was a Major-General and had served as a commander in the Permanent China Brigade during the Marco Polo Bridge Incident in July 1937. From August 1937, he served as the Deputy Chief of Staff of the North China Army; from February 1938 to January 1939, he served as the Chief of Staff of the Central China Expeditionary Army.¹⁷ With this service record, Kawabe was certainly in a position to know of Japanese employment of CW in China. In a previous interrogation, conducted one month prior, Kawabe had

¹⁴Ibid., pp. 1–2.

¹⁵Ibid., pp. 2, 4–5.

¹⁶Ibid., p. 6.

¹⁷In January 1939, Kawabe returned to Japan to assume the post of Deputy Inspector-General of Military Education, then became Inspector-General himself in September. After serving a short stint as the C-in-C of the IJA 3rd Army, in August 1942 he was promoted to Chief of Staff of the China Expeditionary Army, in which post he served until March 1943. See: Kawabe Masakazu (1886–1965). *The Pacific War Online Encyclopedia*. http://pwencycl.kgbudge.com/K/a/Kawabe_Masakazu.htm. Accessed April 11, 2015.

disavowed any knowledge of chemical weapons having been used in China, nor would he subsequently admit to having requested approval for their use. But now, Kawabe made exceptions for “special smoke,” which in this case referred to a smoke candle the Japanese called *aka-to* (“red candle”), which was actually diphenylcyanarsine (DC), a sneezing gas frequently used by Japanese forces in China. Beebe questioned Kawabe concerning various battles in which such “special smoke” had been deployed, including one occasion where some six or seven thousand special smoke candles had been used. When pressed for information on these incidents, Kawabe consistently replied, “I do not remember,” a refrain he repeated often.¹⁸

Beebe then questioned Kawabe about a document that bore his name, entitled, “Lessons from the China Incident,” which was published by the Inspectorate General of Military Education, Chemical Warfare Section, on April 15, 1939.¹⁹ Beebe confronted Kawabe with a copy of “Lessons” and pointed to the entry for chapter six, entitled, “The Chinese Army as Seen from the Point of View of Chemical Warfare.” This chapter enumerated the many deficiencies of the Chinese military forces in defending against chemical weapons, including evaluations of the poor quality of Chinese gas masks, the fact that they were not issued to all Chinese soldiers, and the observation that those who did have them often lacked proper training in their use. One entry in this chapter noted that some Chinese soldiers had “died by asphyxiation, sticking their noses and mouths into the ground” to avoid breathing the smoke.²⁰

When confronted with such damning evidence of Japan’s CW in China, Kawabe again disavowed any knowledge of poison gases and stated these must have been instances of use of “special smoke,” which he insisted was a non-toxic gas. Beebe pressed Kawabe further about policy concerning the use of more lethal gases, including mustard, lewisite, and phosgene. To this, Kawabe replied, “The use of these gases was not thought about. No one had it. It was forbidden.” Kawabe then attempted to differentiate “special smoke” from poison gases, but claimed that this was his “private opinion” and that he could not speak for the army. Beebe followed, “What about international law and treaties on the use of gas?” Kawabe answered, “In my opinion treaties did not cover special smoke.”²¹ Thus, in such a manner, the top brass of the Imperial Japanese Army parsed the language of international law that prohibited chemical weapons and rationalized the use of “special smoke” as a non-lethal gas.

¹⁸Marshall Interrogations, “Continued Interrogation of General Masakazu Kawabe,” April 10, 1946, pp. 1–4.

¹⁹Ibid., pp. 1, 6–8. A copy of “Lessons” may be found in Chief Chemical Officer, “Intelligence Report on Japanese Chemical Warfare,” pp. 87–124.

²⁰Marshall Interrogations, “Continued Interrogation of General Masakazu Kawabe,” pp. 6–7.

²¹Ibid., pp. 8–9.

Beebe encountered this rhetoric yet again when interrogating General Hata Shunroku. Like Kawabe, Hata also began his long and infamous career in the China Theater. Hata assumed command of the Central China Expeditionary Forces in February 1938 and held that post until December, when he became a member of the Supreme War Council. In September 1939, Hata was appointed Minister of War and served under two successive prime ministers until being replaced by Tojo in July 1940. In 1941, Hata was appointed Commander-in-Chief of all armies in the China Theater, including the North, Central, and South China Armies.²² Clearly, Hata should have been quite well-informed about CW policy in China. In his interrogation of Hata, conducted on April 11, 1946, Beebe had him articulate a clear chain of command from the Cabinet level on down through the top ranks of the army. Then, Beebe sought to identify the level at which the employment of “gas warfare” could be authorized. Hata was firm in his assertion that approval for use of poison gas could only come from the Imperial General Headquarters, and that it was expressly forbidden while he served as commander of the Central China Expeditionary Force in 1938. Beebe next asked Hata *when* he received permission to employ gas weapons. Hata replied, “In each case we were authorized by Imperial General Headquarters. There was no blanket authority.” Beebe followed with “When did you first receive authority to employ gas?” Surprisingly, Beebe then started to get from Hata the sort of information he was seeking.

Although it is difficult to determine tone from a transcript, Hata’s answer appears rather matter-of-fact. He stated, “Tear gas could be used at any time. No specific permission was necessary. Sneezing gas (*aka-to*) could also be used at any time.”²³ He also admitted that they had achieved “very good results” using tear and sneezing gases and experienced few to no casualties when these were deployed in combat against the Chinese, most of whom did not have gas masks and would “break and run” or flee in disorder “the minute sneezing gas was used.” When pressed to make a distinction between these agents and poison gas, Hata stated, “Poison gas is one which kills or has a permanent disabling effect. I think mustard, lewisite and phosgene are poison gases, but tear and sneezing gases are not. Where avoidable, we did not use tear and sneezing gas, nor did we use it recklessly. Only where we expected great loss to ourselves or the enemy did we use it.”²⁴

Hata had revealed perhaps more than he intended, for he had actually confirmed for Beebe that, in fact, no special authorization was needed to use such gases, that they could be used “at any time,” and that they were a common weapon frequently used by Japanese soldiers in China. Indeed, when asked if he had ever ordered his

²²His authority did not extend to the Kwantung Army in Manchuria, which remained under a separate command. Marshall Interrogations, “Interrogation of General Shunroku Hata,” April 11, 1946, pp. 1–2. See also: Hata Shunroku (1879–1962). *The Pacific War Online Encyclopedia*. http://pwencycl.kgbudge.com/H/a/Hata_Shunroku.htm. Accessed April 11, 2015.

²³Marshall Interrogations, “Interrogation of General Shunroku Hata,” p. 3.

²⁴*Ibid.*, p. 5.

troops to discontinue using these gases in China, Hata replied, “No. They could use sneezing gas without stopping. That was the policy of Imperial General Headquarters.”²⁵ Hata may have been truthful on this point, but on so many others, Tojo, Kawabe, and Hata were obviously lying. Japanese forces in China clearly had used gases other than the tear and sneezing varieties. Of 65 incidents of CW reported in a document dated October 6, 1944, the vast majority indicated use of vomit-inducing gases, blistering agents, and in one instance, the possible use of a nerve toxin.²⁶ In any case, it was now clear that CW policy in the China Theater permitted the widespread and common use of harassing agents such as tear and sneezing gases, and that other, more lethal types of poison gases were also used, although on a more limited basis.

From 1942 through 1943, Japan’s use of poison gases such as vomiting and blistering agents as well as mustard gas and lewisite actually increased on the China front.²⁷ Although US President Franklin D. Roosevelt had denounced Japan’s employment of CW in China as early as 1938, there was little he could do to stop it. With the US now in the war, however, and with more incidents of poison gas use being reported, Roosevelt attempted to take a more aggressive stand. On June 5, 1942, he publicly stated, “I desire to make it unmistakably [sic] clear that if Japan persists in this inhuman form of warfare against China or against any other of the United Nations, such action will be regarded by this Government as though taken against the United States and retaliation in kind and in full measure will be meted out” (Rosenman 1950, 258). Any such threats to retaliate in kind at that time, however, were largely hollow and not likely to be realized as the US did not then possess sufficient quantities of chemical weapons in the Pacific to respond on a large scale (Spiers 1986, 73–75; Moon 1984, 12–14). But it was important, perhaps, for the US to clearly articulate its own CW policy in order to attempt to deter further Japanese use of chemical weapons in China.

As the Allies began to advance further across the Pacific, Japanese military forces’ use of chemical weapons diminished significantly. In the Pacific Theater, chemical weapons were to be used only on the defensive and *only if* the Allies used them first. This policy was strictly observed with very few exceptions. For example, during the Battle of Guadalcanal, which typified the intensity of combat that was all too common in the jungles of the Southwestern Pacific, on two occasions, January 23 and 28, 1943, Japanese soldiers resorted to using toxic smoke against US troops. Such incidents could be looked upon as the actions of a few desperate men and

²⁵Ibid., pp. 5–9.

²⁶“Reports of Incidents of Use of Gas by Japanese,” October 6, 1944, RG 319, Publications File, Entry 82, Box 2098, US National Archives, College Park, Md., pp. 1–5.

²⁷Ibid.

were not likely pre-planned.²⁸ Nonetheless, in April 1943, President Roosevelt issued yet another stern warning stating that if any of the Axis Powers used gas against any of the Allies, the US would “retaliate with overwhelming force.” But Roosevelt also made clear that the US would not be the first to initiate chemical warfare.²⁹

Roosevelt’s warnings and his articulation of US CW policy appear to have had an impact. Tojo acknowledged as much during his interrogation, stating, “I thought, as I had from the beginning, that the use of gas would be very disadvantageous for Japan because of America’s tremendous industrial capacity and this statement of the President strengthened my own ideas.”³⁰ This response was echoed by Major General Akiyama Kinsei, who served as the director of the army’s CW training school at Narashino from 1935 to 1940. During his interrogation, Akiyama confirmed that Roosevelt’s threat of massive retaliation likely prevented the spread of CW attacks throughout the Pacific.³¹ Roosevelt’s declaration may also have led to a wider de-escalation of CW in China, as well as the actual termination of large-scale industrial production of poison gases in Japan.³² As the war in Europe turned decisively against Germany following the D-Day invasion in June 1944, Japan’s military leaders began to worry that Germany might resort to using chemical weapons to stop the Allied advance on Berlin. In the summer of 1944, the Japanese army ordered the recall of all stocks of gas munitions in the field to depots in rear echelon positions. This order was given as a precaution “against irresponsible use by isolated units in desperate situations which might provoke full scale retaliation.”³³ Not only were the Japanese concerned that the US would retaliate against Japan if Germany initiated CW in Europe, they now sought to minimize the possibility that any chemical weapons would be used by their own forces in the Pacific Theater.³⁴

The Japanese apparently trusted Roosevelt’s pledge not to initiate a first strike, but they also took precautions not to precipitate one by the US late in the war. Theoretically, at that point, the US could have hit Japan with a CW attack without

²⁸The report indicates it was a “choking gas,” but does not elaborate on the means of dissemination, whether by smoke candle, grenade, mortar, or otherwise. See “Reports of Incidents of Use of Gas by Japanese,” October 6, 1944, RG 319, Publications File, Entry 82, Box 2098, US National Archives, College Park, Md., p. 3; “Condensed Statement,” p. 1.

²⁹Marshall Interrogations, “Interrogation of General Hideki Tojo,” p. 4.

³⁰Ibid.

³¹Major H. Skipper, interview with Major General K. Akiyama, October 16, 1945, in GHQ, “Report on Scientific Intelligence Survey,” appendix CW-13-3.

³²In September 1944, the army’s primary facility for chemical weapons production at Okunoshima was converted to the manufacture of conventional explosives. See Target No. 635, “Manufacture of Poison Gases,” RG 319, Entry 85A, MIS#: 235950-1, US National Archives, College Park, Md., p. 1.

³³Chief Chemical Officer, “Intelligence Report on Japanese Chemical Warfare,” pp. 7–8.

³⁴According to the report of the Chief Chemical Officer, “The Japanese were even prepared to overlook small scale local tactical use by the Allies to avoid general gas warfare [... although] Retaliation would have been attempted in the event of large-scale attacks.” Ibid., pp. 7–8.

violating the Geneva Protocols' prohibitions against first use. Allied CW policy, as stated in the Combined Chiefs of Staff document 106/2, and as clearly articulated in numerous declarations by Roosevelt and Prime Minister Winston Churchill, considered an attack on any United Nations ally to be an attack on the US or Great Britain. Thus, because Japan had already initiated CW attacks upon China, the US would have been justified in retaliating in kind (Moon 1984, 12–13, 1996, 501). But it did not. Historian John Ellis van Courtland Moon provides several reasons for US restraint. First and foremost was the “widespread moral revulsion against chemical weapons” engendered by their use in the First World War. Secondly, Allied CW policy was limited to deterrence and retaliation. Third, chemical weapons “offered limited military advantages and carried serious liabilities.” Finally, Moon argues, the US was “unprepared throughout the war to wage chemical warfare in the Pacific Theater.” In short, “preparations always lagged behind policy” (Moon 1989a, 40–42; b, 317).

Although deploying chemical weapons on a large scale presented certain logistical difficulties in the Pacific Theater, they were not insurmountable. Military and government leaders in the US began to call for their use as early as the summer of 1943. The “Island Hopping” campaign in the Pacific had resulted in the accumulation of excessive casualties, particularly among the US Marines, to whom the duty of being first to land and establish beachheads usually fell. Following the battle of “Bloody Tarawa” in November 1943, the Chief of the US Chemical Warfare Service, General William N. Porter, argued for the employment of poison gas against the remaining Japanese forces in the Pacific. He argued, “the tactical advantages of using gas against entrenched enemy positions were undeniable.” Moreover, they were justified, as the Japanese had already used poison gas in the China Theater. But his request was denied. At that time, Roosevelt and the Chiefs of Staff were concerned that such use would proliferate to Europe and provide Hitler a rationale for using chemical weapons against Allied forces in any attempted cross-channel invasion. At least while Germany remained in the war, the Allies could not risk any proliferation. (Moon 1984, 17) Yet, even after the defeat of Germany, when US Army Chief of Staff General George C. Marshall proposed CW use in a pending invasion of the home islands of Japan, his request was denied on “moral and policy grounds” (Moon 1989a, 42). Once Germany was defeated, numerous “liabilities” of CW use disappeared, but the tactical advantages remained.

Others argued that the military advantages of using CW against Japan in the Pacific far outweighed any liabilities once Germany was out of the war. Experiments with mustard gas in late 1943 suggested it would be a highly effective weapon in the Pacific, especially in tropical jungles with high humidity. Experiments conducted at the Dugway Proving Ground in Utah suggested that various gas weapons—in combination with more conventional weapons—might be effective in attacking defensive positions in caves, which could be critical should the Allies have to fight all the way to Japan and invade the home islands proper. But another study undertaken jointly by a team of Americans and Canadians in July 1944 concluded, “comparisons of CW requirements with actual HE [high explosive] expenditures in specific operations do not add materially to the picture”

(Freeman 1991, 32–37; Moon 1989b). The stigma attached to CW was a significant factor in delaying its initiation in the Pacific, although the US continued to stockpile a variety of chemical weapons in the summer of 1945 in preparation for the pending invasion of Japan. (Allen and Polmar 1997; Moon 1989b) Ultimately, however, the US did not employ CW in the Pacific Theater. That decision was obviated by the use of an even more devastating weapon—the atomic bomb.

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