



Has Syria's Chemical Weapons Arsenal Truly Been Dismantled?

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EXECUTIVE SUMMARY: June 30 marks the due date for the complete disarmament of Syria's chemical weapons arsenal. Although Assad may have relinquished the majority of his chemical weapons stockpile, the regime most probably possesses additional 'undeclared' chemical and biological weapon facilities, creating a complex situation with consequences that cannot be ignored.

June 30, 2014 was set to be the deadline for the complete elimination of Syria's chemical weapon (CW) capabilities, with the last portion of the declared arsenal removed from Syria just last week. But Syria has not been completely co-operative with international inspectors to say the least, and a lot of inquiry and supervision are still to be conducted. As the final date approaches, this paper aims to examine the events that lead to this situation, and highlight the various implications.

Currently, Syria is heavily involved in a lengthy, uncertain civil war. Consequently, Syrian President, Bashar al-Assad, has been loath to completely dispose of Syria's CW capabilities, as this essentially means the loss of a crucial component of his armament inventory. If not restrained internationally, Assad will definitely continue to use CW whenever conventional weapons are regarded by him as inadequate. The Syrian regime is fully aware of the critical role of CW for the outcome of the civil war. Assad has no moral qualms about using CW, and his Russian and Iranian allies would not truly discourage him from doing so, particularly if he is on the verge of losing the war.

Nevertheless, it seems that Syria has 'sacrificed' a major portion of their CW arsenal. Threats of an attack on Syria by the U.S. for repeatedly and brutally using CW throughout the civil war has certainly had some influence in this. Ostensibly, Assad has met the Syrian undertaking of chemical disarmament, but in reality, the remaining, seemingly marginal, issues are of great concern and have dangerous potential.

A. In September 2013, upon declaring the quantity of the existing CW arsenal and production plus operational capacities, Syria reported 23 sites, the locations of which are not publicly disclosed. According to Syria, these sites held a combined 41 facilities containing "1,300 tons of chemical precursors and agents, plus 1,230 unfilled munitions." Currently, no further investigations have been held in Syria to ascertain that no additional sites and/or additional quantities existed and/or were added.

B. It is not clear whether since September 2013 production of CW was entirely stopped throughout Syria. Additionally, reports by the Syrian opposition claiming hidden CW (mainly VX agent-loaded) in the area of Hama cannot be ignored. The opposition's claim that at least 20% of the Syrian CW arsenal was not declared might be true.

C. The employment of toxic chemicals by the Syrian regime continued during the first half of 2014. The chemical attacks mainly included chlorine, ammonia, and possibly additional toxic chemicals, such as pesticides. Regardless of the list of chemical warfare agents Syria declared, common and industrial chemical weapons have been and may still be used. The typical delivery mode has been dropping intoxicating barrel-bombs from helicopters. Airborne chlorine-releasing canisters have been used as well.

D. Although prohibited by the CW and BW (biological weapons) conventions, no toxic materials of biological origin, namely toxins, were declared by Syria. However, such agents are probably present in the Syrian arsenal. Besides, it is highly likely that Syria also continues to maintain certain pathogens as deployable biological warfare agents.

E. The security and safety within the remaining Syrian CW facilities are doubtful. Although often serving Assad as an excuse, there is a tangible danger that the rebels seized, or are prone to seize, undeclared depots of Syrian CW. It is noteworthy that the Libyan army prevented the dispatch of mustard gas from Libya to the rebels in Syria.

Unsurprisingly, various hurdles to enforcing the agreement were raised by Syria. Damascus proposed rendering the facilities inoperable. Yet that claim

was rejected as easily reversible, and therefore as falling far short of the requirement under the Chemical Weapons Convention that all aspects of its program be destroyed. Damascus has also denied free access to the inspectors to some of the relevant facilities.

Furthermore, Syria was demanded to revise their provided list of CW and consequently submitted a "more specific" list. The original list had been based on estimates, not exact amounts of toxic agents found in storage and production facilities across Syria. The revision of the list took place only after considerable discrepancies were pointed out between what the inspectors revealed, and what was on the original declaration. At any rate, it is doubtful that the revision is adequate.

Assad is reluctant to give up the remaining declared CW production facilities, and probably additional undeclared chemical armament. For now, the job done by the inspectors is notable, but is far from complete. Lessons should be learned from the sagas that took place during the chemical disarmament of Iraq and Libya. An undesirable zigzag chronicle that might now be emerging with regard to the total elimination of CW and related facilities in Syria ought not to be repeated.

Paradoxically, in spite of all the impediments and risks, the Assad regime is perhaps the lesser of two evils in terms of handling the issue of the CW capabilities still found in Syria. The ideal alternative, even if theoretical for now, is to establish a Western or Western-Russian apparatus that will take hold of all of Syria's CW related installations and fully control their contents. This might eventually be the ultimate scenario, considering that special Western and Arab units are still being trained for coping with toxic materials and atmospheres found in Syria.

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