



PERSPECTIVES

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Syria's Growing Chemical Weapons Entanglement

by Lt. Col. (res.) Dr. Dany Shoham

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EXECUTIVE SUMMARY: The chemical weapons (CW) possessed and employed by Syria since it undertook to completely get rid of them have become an increasingly tangled web over the past year. This has many ramifications, particularly in light of the recent US-Britain-France raid against Syria.

Irrespective of the practical impact of the recent US-led raid on Syria, the very fact that such raid took place signifies the genuine and uncompromising condemnation by the Western powers of the use of CW by Assad. While limited in scope, the raid was a meticulously coordinated, strategic military operation. Syria's CW capability remains significant not only because appreciable quantities of CW were hidden, but because it appears that an orderly renewal of CW production was covertly commenced. The full extent of these two Syrian capacities is not known.

More intriguing is the Syrian employment of CW. The concrete mechanism of Assad's decision-making in relation to the transition from conventional to chemical weapons (CW) is not clear. It can be assumed that he is the authority approving that transition, at least in those cases where sarin was employed (this is not necessarily the case with chlorine).

Whether or not there is Russian and Iranian involvement in this mechanism – and it is entirely plausible that there is – Assad knows very well that he has both those actors' full backing. This is a meaningful factor, as without it he would certainly be appreciably more reluctant to employ CW.

At any rate, the interplay is wide and complex. Had it been entirely up to Assad, unlimited by any obligation, he would likely have used CW much more frequently due to his brutal nature. This would have considerably shortened the war. Conversely, without any backing from Russia and Iran, the employment of CW by the Syrian regime would likely have been extremely rare, if it occurred at all.

The situation is between the two. From a purely military standpoint, the Russians and the Iranians are fully aware of the operational advantage of CW over conventional weapons, and are hence basically supportive. One way or another, they are involved in concealing and augmenting residual Syrian CW capabilities. North Korea is involved as well, particularly in light of its relationship with Iran.

In opting for CW, a choice must be made between chlorine and sarin. The operational and intimidation impact of sarin considerably exceeds that of chlorine, and its use is not tolerated by the West. Syria's CW use of chlorine, however – a common industrial element – has often been ignored. The use of forms of CW that are clinically directly incriminating, such as mustard, is avoided.

The Syrian regime's desire to use CW has stemmed largely from its inability to achieve, or major difficulty in achieving, various tactical, operational, and strategic goals – either military or demographic – by means of conventional weapons. This was a chief driver behind Syria's retention of sarin.

A special OPCW team arrived in Syria on April 14, 2018, but it was not until a full seven days had passed that it gained access to the site in Douma where CW had been used. "It is very likely that proof and essential elements are disappearing from this site," the French foreign ministry noted in a statement. Russia's foreign minister, Sergei Lavrov, strongly denied any tampering had taken place. Other Russian officials claimed, oddly, that inspectors had not been able to visit Douma because of the April 12 US-Britain-France air strikes (and because they lacked the correct permits).

It can be assumed that access was granted only after the chemically attacked area in Douma had been scrubbed by the Syrian regime and the Russians of whatever evidence might have indicated that a chemical attack had taken place. An effort was also likely made to eliminate signs that such cleaning had been conducted. This is a farce that has been repeated time and again.

The chronology of events preceding the Douma chemical attack is worth noting. A vital component of the Ghouta area, the city of Douma had been under rebel occupation since October 2012. It was controlled by the Jaysh al-

Islam rebel coalition. By mid-March 2018, rebel territory in Eastern Ghouta had been reduced to three pockets: one in the south around Hamouria; one in the west around Harasta; and one in Douma in the north.

In the second half of March, Hamouria and Harasta were secured via evacuation deals agreed to by the rebels, Syria, and Russia. Douma remained tenacious, even after two smaller chlorine gas attacks were reported – one on March 7 and another on March 11.

On March 31, the last of the evacuations from Ghouta was conducted and the Syrian army declared victory in Eastern Ghouta. The rebels still holding out in Douma were given an ultimatum to surrender, but they refused to do so. One week later the major chemical attack occurred, and a day later all rebels controlling Douma agreed to a deal with the government to surrender the area and be transferred therefrom.

During that chemical attack, barrel bombs suspected of being filled with chemical munitions were dropped by helicopter. They caused severe convulsions in some residents and suffocated others. Some 73 persons – men, women, and children – were poisoned to death, many foaming at the mouth, while about 500 were injured and survived. Reportedly, a chlorine bomb struck a Douma hospital, and another containing "mixed agents" – apparently chlorine and sarin – hit a building nearby. Yellow compressed gas cylinders were also allegedly used during the attack.

The West, which had fairly strong intelligence, publicly accused the Syrian regime of having conducted the attack. The regime and Russia categorically denied the allegations, as they always do.

All in all, the Syrian air force presumably used CW against ordinary families in the form of chlorine together with another, appreciably more potent toxicant, likely sarin, plus a blurring component. Perhaps the thinking was that the event would be regarded as a chlorine attack and consequently ignored.

A coordinated military western attack in response

The US, Britain, and France conducted the attack on April 12, one year after the US (alone) attacked the Syrian Shayrat airfield and nearby Syrian military infrastructure. That event, which took place three months after Donald Trump took office as president of the US, followed a sarin attack conducted by the Syrian air force on the town of Khan Shaykhun in the Idlib Governorate.

Unlike Obama, Trump took a decisive military posture regarding the employment of CW. That posture was strictly followed in 2017 and amplified

in April 2018, the second time within the framework of an operational alliance with Britain and France.

Russia and Iran (the latter indirectly) are clearly involved. Together with Syria, they will have to thoroughly reconsider the wider geopolitical situation and the strategic aspects of the Syrian CW program. Beyond the annexation of Crimea by Russia, Syria has become a focal dispute between the West and Russia over the illegitimacy of CW.

Out of eight Syrian installations considered by the US, Britain, and France as potential targets for a responsive strike, at least three were attacked. The eight were:

1. Masyaf CW factory
2. Barzeh CW factory
3. Jamraya CW factory (set up with Russian help)
4. Him Shinshar CW facility, Homs area
5. Additional CW facility in Him Shinshar
6. Al-Typhur (T-4) Airbase, Homs area
7. Al-Dumayr Airbase
8. Aleppo (presumably the Al-Safira facility or the Sheik Suleiman facility)

The three installations eventually attacked are directly affiliated with the Syrian active CW alignment, as follows:

Scientific Studies and Research Center at Barzeh

This is known to be the core Syrian facility for research, development, production, and testing of chemical and biological warfare technology. It specializes in installing CW on long-range missiles and artillery. Manufacturing and maintenance of munitions were taking place in closed sections inaccessible to OPCW inspectors. Notably, the OPCW reported that it had carried out two [inspections](#) of the Barzeh and Jamraya facilities in February and November 2017 and had not seen "any activities inconsistent with obligations under the CW Convention".

Three main buildings at that center were destroyed, while 76 missiles were fired at the facility – 57 Tomahawk cruise missiles and 19 joint air-to-surface stand-off missiles. Lt. Gen. Kenneth McKenzie, director of the US military's Joint Staff, said, "Initial assessments are that this target was destroyed. This is going to set the Syrian CW program back for years."

Him Shinshar CW storage site, west of Homs

This facility is believed to have constituted "the primary location of Syrian sarin and precursor production equipment". It was used to "keep CW precursors stockpiled in breach of Syria's obligations under the Chemical Weapons Convention" and was intended for binary chemical munitions. Twenty-two missiles hit the facility – nine US Tomahawk missiles, eight British Storm Shadow missiles, and five naval cruise missiles and two SCALP cruise missiles launched by France. It has been accentuated that "very careful scientific analysis was applied to determine where best to target the Storm Shadows to maximize the destruction of the stockpiled chemicals and to minimize any risks of contamination to the surrounding area. The facility which was struck is located some distance from any known concentrations of civilian habitation, reducing yet further any such risk."

Him Shinshar CW bunker, west of Homs

Located about seven kilometers from the storage site, this facility contained both a CW equipment storage facility and an important command post. Seven SCALP missiles were deployed and the bunker facility was "successfully hit".

While it is basically true that the reviving Syrian CW program was apparently set back for years, as contended by Lt. Gen. McKenzie, this does not mean the Syrian regime army cannot reuse CW. This is certainly true regarding chlorine-based CW, and is likely true in regard to sarin-based CW. Should the Syrians find themselves without sarin, they might be able to reproduce it in small quantities within months.

Curiously, while neither Jamraya nor Masyaf was mentioned in McKenzie's list of attacked sites, they were mentioned by formal Syrian and Russian sources as having been targeted by the American-British-French raid, together with other facilities such as arms depots in the eastern Qalamoun region northeast of the capital, the center at Barzeh, the Kisweh area south of Damascus, a site in the Qasyoun hills, along with several airbases, including the al-Shirai airbase in al-Dimas. Thus far, except for the center at Barzeh, those claims have not been verified. Still, in a statement condemning the Western raid, Russian foreign minister Lavrov said, "We told the USA where our red lines were, including the geographical red lines, and the results have shown that they haven't crossed those lines."

The issue of Syrian CW has grown significantly more complex and challenging, both regionally and globally, over recent months. It contains the dangerous potential for repeated CW employment, with resultant escalating international frictions, as well as prospects for a restraining of the Syrian CW program. While

the chance that CW will be completely eliminated in Syria is diminishing, the need for such a total elimination is increasing.

Comments made by key Israeli individuals are worthy of note. PM Netanyahu said, “[U]nder American leadership, the US, the UK, and France demonstrated that their commitment to the fight against CW is not limited to declarations.” He added that Israel fully supports the attack, and “it should be clear to President Assad that his reckless efforts to acquire and use weapons of mass destruction, his wanton disregard for international law and his provision of a forward base for Iran and its proxies, endanger Syria.” Yoav Galant, a member of the security cabinet and a former general, said, “The American strike is an important signal to the axis of evil – Iran, Syria and Hezbollah – the use of CW crosses a red line that humanity is no longer willing to accept.” Ex PM Ehud Barak maintained that if CW are employed by the Syrian regime in Syrian locations near the Golan border with Israel, then Israel will have to consider how to react.

Lt. Col. (res.) Dr. Dany Shoham, a microbiologist and an expert on chemical and biological warfare in the Middle East, is a senior research associate at the Begin-Sadat Center for Strategic Studies. He is a former senior intelligence analyst in the IDF and the Israeli Defense Ministry.

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