

Resurgence of Chemical Weapons as an Instruments of Terror

Old Weapons – New Uses

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The Trench

Terrorist Use of WMD

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Resurgent interest in chemical weapons?

- Terrorism with CW
 - Aum Shinrikyo (Japan, 1990 – 95)
- Use by terrorist entities as means of warfare
 - Opportunistic use of industrial toxic chemicals
 - Use of indigenously produced warfare agents
- Military use (Syria, December 2012 - Present)
 - As a battlefield weapon for tactical use (sarin, chlorine)
 - Up to 2017
 - As a strategic instrument of terror (mostly chlorine)
 - Especially from late 2017 onwards
 - As a tool of strategic communication
 - Occasionally since acceding to the Chemical Weapons Convention (CWC, October 2013)
- Use of military-type of agents as assassination weapons
 - Aum Shinrikyo (against opponents; member executions)
 - Kuala Lumpur, Malaysia (February 2017)
 - Salisbury, UK (March 2018)

Aum Shinrikyo (Japan – 1990-95)

- Goal: Take over government of Japan
- Development of wide array of weaponry + large military force
 - CB agents intended to destabilise society (provocation of Armageddon)
 - Major CB research, development and production programme
- Sarin attacks in Matsumoto (1994) and Tokyo (1995)
 - Matsumoto: 8 fatalities; about 600 injured
 - Tokyo: 13 fatalities; 5500 other casualties (a large majority psychological distress)
- Outcome: failure
 - Strategic goals never attained
 - Both sarin attacks were tactical operations to thwart threats against cult
 - Biological weapon programme never produced a usable agent, even on research level
 - Cult dismantled; leaders arrested and tried (and now executed)

Terrorism or method of warfare?

- **Repeated use**
 - Several attacks involving chlorine attributed to *Islamic State in Iraq and the Levant* (ISIL) since the 2nd half of 2014
 - Most in Syria, but also in Iraq
 - Three incidents involving mustard agent (Iraq and Syria)
 - ISIL precursor organisation – *al-Qaeda in Iraq* (AQI) – organised over 20 chlorine attacks in Iraq between October 2006 and July 2007
- **Purpose**
 - Terror played a significant role in AQI and early ISIL attacks
 - Targeted civil population to subdue local inhabitants (AQI & ISIL)
 - Used against combatants to frighten and demoralise combatants defending positions
 - From early 2015 on, increasing indications that toxic chemicals began supporting military operations
 - Initially chlorine released via Improvised Explosive Devices (was not very effective)
 - Isolated testing involving single mortar rounds already in autumn 2014
 - Late spring 2015: more concentrated attacks with many mortar rounds in support of combat operations
 - Use of mustard agent confirmed by OPCW, but purpose unclear
 - Isolated incidents

Opportunistic use of industrial toxic chemicals

- **Basic characteristics**
 - No autochthonous development or production of the toxic agent
 - Usually obtained from industrial production plants or storage sites
 - Attacks end after stockpile of toxic agent has been depleted
- **Challenge**
 - Other types of attack have involved sabotaging storage facilities, deliberate release into the environment (industrial action), or deliberate targeting of such installation by artillery (e.g., around Sarajevo)
 - In criminal or terrorism cases, occasionally off-the-shelf poisons (e.g., rodent exterminators) or caustic substances (e.g., acid attacks) have been applied
 - More toxic substances than those usually considered as warfare agents become possible weapons
 - E.g. in the Middle East *phosphine* – a chemical belonging to the nerve agent family – is widely used in agriculture as rodent pesticide or fumigant

Weapon innovation

- **AQI (October 2006 – July 2007)**
 - No development or production of the agent (chlorine)
 - Obtained from water purification installations and captured lorries
 - Attacks ceased when sources depleted and after the Iraqi government stopped chlorine transport from Jordan and Syria
 - Consequence: upsurge in cholera cases in and around Baghdad
 - However, some development in dissemination technology
 - Initially, explosives too strong and destroyed chlorine; casualties from debris
 - Spring 2007: explosives more calibrated; some casualties suffering from chlorine inhalation
- **ISIL (2014 – 2016)**
 - Opportunistic use of chlorine in Syria, but less certainty about provenance
 - First reports were not unlike those about AQI
 - Autumn 2014: reports from Iraq suggesting testing of different dissemination devices, including mortar rounds
 - Late spring 2015: several reports of attacks involving many chlorine-filled mortar rounds, some confirmed by the OPCW Fact-Finding Mission (FFM)
- **Mustard agent**
 - 3 attacks attributed to ISIL in Iraq and Syria
 - Initially, many hypotheses about origin (production in Mosul, al Muthanna CW site in Iraq, recovered battlefield munitions from Iran – Iraq war, former Syrian stockpile, etc.)
 - OPCW FFM confirmed indigenous production, but:
 - How large was the programme?
 - What was its production capacity?
 - Who and how many persons were involved?

Chlorine use by Syria: Strategic tool of terror

- Strategy emerged after Syrian forces started to regain control over territory lost to insurgents and ISIL
 - First observed in 2017; increase of incidents in late 2017 and 2018
- Implementation
 - Encirclement of insurgent forces
 - Large civilian population in encircled pockets
 - After military pressure has been maximised, offer to insurgent forces to negotiate a withdrawal for them and trapped civilians in their area
 - If an insurgent group accepts, people may evacuate the pocket
 - If an insurgent group refuses, its area of control is targeted with chlorine
 - Evacuation conditions usually accepted after a few chlorine barrel bomb attacks
 - Government forces take control over area
 - Next military target: Defenders are forewarned (psychological impact)
- Rotterdam, 14 May 1940: a precedent
 - Nazi Germany air force eradicated the city
 - Threat of repeat actions if Netherlands government were to refuse to surrender
 - Netherlands government surrendered

Syrian CW use: Strategic communication

- **Communication to own population**
 - Demonstration of strength
 - Despite international pressure, the government resists and demonstrates that it is in charge
- **Communication to insurgents**
 - The government is in charge
 - The government will defeat the insurgency whatever it takes
 - Communication of a certain sense of impunity
 - Method of forewarning insurgents of fate if they do not evacuate areas
- **Communication to the international community**
 - We shall be victorious
 - After victory, there will be no criminal repercussions
 - Especially from late 2017 onwards
 - We retain total sovereignty over our actions, despite CWC accession
 - Pushing international response capacity (via OPCW, UNSC) to its limits → Russian vetoes
 - Full denial of events / claim of insurgent responsibility: public opinion battle
- **Communication strategy may explain isolated incidents of sarin use**
 - E.g. Khan Sheikhoun, 4 April 2017 (led to end of OPCW – UN Joint Investigative Mechanism)

Assassination with military-type CW

- **Aum Shinrikyo use of VX, December 1994 – January 1995**
 - 1 person died; 2 other ones survived attacks (suspected spy; dissidents)
 - Initially, investigators suspected use of organophosphate compound, but did not identify the VX agent until after the arrest of cult member later in 1995
 - Reported execution of 20 cult members with VX
- **Murder of Kim Jong-nam, Malaysia, 13 February 2017**
 - Ordered by the DPRK (not a party to the CWC)
 - VX applied by two women, possibly in binary form (women had time to wash their hands afterwards; walked away from airport; no reports of poisoning)
 - Malaysia conducted investigation independently
 - OPCW involvement limited to supply of VX reference kits after technical assistance request
- **Assassination attempt on Sergei & Yulia Skripal, UK, 4 March 2018**
 - Russian military intelligence implicated (Russia is party to the CWC)
 - Nerve agent used identified as belonging to the *Novichok* family
 - Developed and produced (not stockpiled) by USSR in late 1980s
 - Relative unknown agent; few refereed research papers; not on CWC or Australia Group control lists
 - UK conducted domestic forensic, criminal and intelligence investigations
 - UK requested OPCW technical assistance to independently analyse and identify nerve agent used
 - UK chose not to invoke other procedures (e.g. under CWC Article 9) to address accusations against Russia

Some implications for the OPCW

- Insurgent use of CW: Awkward problem from a legal perspective
 - Use of CW by a non-state actor against another non-state actor on the territory of a State Party that is not in control of that territory
 - Problems for
 - Investigation of allegations
 - Attribution of responsibility
 - Sanctioning perpetrators (domestic penal law; international criminal law)
 - Scope of action for States Parties to CWC; UN Security Council
- Near-universality of the CWC
 - Risk that States Parties, nationals from States Parties or entities operating from the territory of States Parties play a role in the acquisition of CW and preparations for their use by insurgents *is not beyond imagination*
 - Already several allegations to that effect related to the Syrian civil war since late 2012
 - The problem needs to be characterised, assessed, and if necessary, addressed
 - For the future of the treaty regime, refutation is as important as confirmation
- Assassination with CW
 - Fine line between domestic crime and CWC violation (consequence of CW definition)
 - OPCW only becomes involved following state party request
 - Victim state party determines whether to involve OPCW and for what purpose



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