

ALLEGED USE OF CHEMICAL WEAPONS IN SYRIA

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Abstract

Whether the many allegations of Syrian poison-gas warfare are or are not true cannot reasonably be judged on the evidence currently in the public domain. This may change if Syrian authorities allow the United Nations investigative team to visit sites inside the country. The best that can be done in the meanwhile is to compare and contrast the contents of the different reports to see if instructive patterns emerge. To this end the present study, which is the latest in the new series of HSP Occasional Papers, provides an annotated compilation of documented records of the allegations. Two tentative conclusions are drawn. One is that the several governments which have explicitly accused the Syrian regime of using sarin nerve-gas against the rebels seem to be withholding evidence that, if disclosed, might make their charges more believable than they are. The gap in disclosure is not so much intelligence from sensitive sources or methods but is instead straightforward description for scientific audiences of the procedures that have been used for analysing physiological and environmental samples. The second conclusion is that, if the allegations are true, Syria is engaged in a form of chemical warfare whose purpose and therefore methods (small scale, pinpoint targeting, disabling) are at variance with concepts underpinning the 1993 Chemical Weapons Convention. It would thus call into question the continuing fitness for purpose of certain of the treaty's provisions, specifically those set by the quantitative possession, declaration and reporting thresholds that were derived from Cold War notions of 'militarily significant' quantities. The CWC was never intended solely as a suppressant of 'weapons of mass destruction', whatever the popular view of it may now have become. Here is a possible problem that the CWC implementing organization, the OPCW, may need to consider in the future, once the pressing demands upon its unique competences and resources have eased.

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Part 1: Introduction

Have chemical weapons been used in Syria, as is now widely reported? For the time being, onlookers can reasonably believe the reporting only if they are willing to trust unsubstantiated assertion or incomplete evidence, or to disregard the history of chemical warfare. That history is full of false CW allegation and of instances in which people who should have known better were led astray by such tales -- either through ignorance or through deception or through self-delusion. It would be foolish to forget, at the present grim juncture in the Middle East, that a bare thirty years ago the huge intelligence apparatus of the United States Government mistook a natural phenomenon -- mass defaecation flights of the *Apis dorsata* honeybee in southeast Asia -- for communist mycotoxin warfare.² That was in the long-running 'Yellow Rain' affair which commenced in Laos during the latter 1970s. Germ and chemical weapons may often be weak in their battlefield applications but they are always strong in their emotiveness. Accusations of association with them have for centuries, even millennia, been used by well-intentioned as well as unscrupulous people to vilify enemies and to calumniate rivals. Can onlookers protect themselves against the possibility of such assaults upon their common sense today? Can they do so and still remain sensitive to the importance of remedial action if the allegations are found to be true, wholly or in part?

This *HSP Occasional Paper* has been compiled with just such protection in mind. It aims to promote prudent scepticism, even though that might offend some readers. It cannot pretend to be an account of the truth, for the truth is clearly unattainable right now. The currently stalled investigation of the CW allegations that the Secretary-General of the United Nations has organized under Dr Åke Sellström of Sweden, with the cooperation of the OPCW and the WHO, could eventually lead us further in that direction. But for the time being there is no authoritative guidance available other than that propagated by interested governments. HSP therefore offers what follows in this paper: a compilation of as many records of Syria CW-use allegations as have come our way, each one being written so as to include information that could guide readers in assessing the reliability and the credibility of what is alleged. So each record is documented; makes extensive use of direct or translated quotation, even where this is in odd-looking English; and seeks out multiple reporting of what could be the same event. The transliteration of Arabic place-names and personal names is regrettably erratic. Editorial comments are occasionally interpolated to emphasize contextual factors that readers might otherwise miss. The records are grouped chronologically within three successive categories. The first comprises records of events that are not themselves allegations of chemical-weapons

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² Merle L Pribbenow, "'Yellow Rain': lessons from an earlier WMD controversy", *International Journal of Intelligence and Counterintelligence* vol 19 (2006) no 4, pp 737-45; and Matthew S Meselson and Julian Perry Robinson, "The Yellow Rain affair: Lessons from a Discredited Allegation", in Anne L Clunan, Peter R Lavoy and Susan B Martin, editors, *Terrorism, War, or Disease? Unravelling the Use of Biological Weapons*, Stanford University Press (2008) pp 72-96.

employment but are instead records of events that may bear upon the allegations described in the two following categories.

Readers will find that records in the first category are prefixed **C** for 'contextual'; in the second category, **L** for 'located' allegations; and in the third category, **U** for 'unlocated' allegations.

Two weaknesses of the paper's structure need stating at the outset. First, the categories permit only an indirect treatment of those drivers of allegation that are expressed as disinformation, black propaganda, false testimony or other such fabrication. Rarely are these dark influences addressed in commentaries. An exception appears in the April 2013 issue of *CBRNe World*, which carries a review of the Syria CW allegations that dwells on the difficulties of deciding where the truth lies. It raises the problem of planted evidence, though it does so with such delicacy that a casual reader may fail to notice.³ Those with long memories will recall episodes in which the suspected or alleged planting of evidence contributed to the Yellow Rain furor noted above.⁴ One particular allegation then involved plans for contaminating samples with the nerve-gas sarin, and it acquired some credence from the possibility that the requisite supply of sarin – a rare commodity demanding the most careful containment -- might indeed exist in the country in the form of a smuggled US Army *Bolt* rocket warhead.⁵ So the recent reports that small supplies of sarin are apparently on the loose in and near Syria have a special salience today; see record C12 below, which of course may itself contain misinformation or disinformation.

The other chief weakness is that the format favours reactive over proactive commentary: it readily allows description of what has happened but does not favour prescription of what should happen. In particular, the format allows no systematic treatment of the different tools that could contribute to establishing the truth. Under the prevailing circumstances, chemical analysis of environmental or physiological samples is a powerful instrument of verification when applied to samples for which a chain of custody has been fully established. This tool has indeed been applied to Syrian samples, but in no case has the application been adequately documented in public. The tendency in commentaries has been to take chemical analysis for granted, without proper recognition of the possibilities for error and for the consequences of inadequate instrumentation and insufficient skill or experience. What must happen if there is to be high confidence in chemical analysis for the detection and identification of chemical warfare agents is therefore described in an annex of its own, in Appendix 1 below. The original text of this appendix was privately circulated in the United States early in May 2013.

The final part of this paper offers concluding remarks that may somewhat compensate for these weaknesses. First, however, come the three sets of records that direct the conclusion.

³ Steve Johnson, "A number of Damascene moments ...", *CBRNe World*, April 2013, pp 16 & 18.

⁴ See, for example, Scott Barnes with Melva Libb, *BOHICA*, Canton, Ohio: Bohica Corporation, Inc (1987).

⁵ Personal communication, 1 May 1985.

Part 2: Records

The first category of records affords a timeline of events that either have marked the present Syrian crisis or indicate something of Syrian thinking about chemical weapons. They are therefore events that set context for assessing the allegations of chemical-weapons use noted in the two subsequent categories.

[C1] Summer 1982. Syria is said to have been given chemical weapons (artillery shell) by Egypt in 1972 but did not start seriously to build its own programme until, according to Israeli Military Intelligence, the 1982 war in Lebanon had exposed Syrian military weakness.⁶ By 1985 it had commenced production of chemical warheads for FROG and Scud missiles and was soon also filling CW agents into aircraft bombs, artillery shell, tank shells, and other munitions.⁷ Initially Syria had to import supplies of agent precursors, but in 1993 the Russian Foreign Intelligence Service reported that “Syria has a developed production of mustard gas and organophosphorus nerve agents based on their own raw material and main semifinished products”. On use doctrine, that same Russian report observed: “It is typical that Syria does not regard the military toxic substances at the disposal of the Syrian army as WMD. According to Syrian military doctrine, military toxic substances are components of military parity only with Israel and will be used only in the event of large-scale aggression from Israel against Syria.”⁸

[C2] 25 November 1996. First public acknowledgement, by the regime of President Hafez al-Assad, that Syria possesses chemical weapons. The logic expressed is deterrence of Israeli nuclear weapons.⁹

[C3] March 2011. The regime of President Bashar al-Assad commences its violent suppression of Syrian ‘Arab Spring’ demonstrators.

[C4] February 2012. Growing international concern about what might happen to Syria’s evidently large stockpile of chemical weapons as the armed militancy in the country degenerates yet further into civil war.¹⁰ The US State Department has reportedly warned Iraq,

⁶ See the remarks of successive heads of Israeli Military Intelligence [Major-Generals (res) Shlomo Gazit and Yehoshua Saguy] reported in Yaakov Katz, *The Jerusalem Post*, 14 June 2012, “Security and defense: chemically unstable. Syria’s chemical weapons program has been focus of Israeli intelligence operations since the mid-1970s”; and see also Michael Eisenstadt, “Syria’s strategic weapons”, *Jane’s Intelligence Review*, vol 5 no 4, April 1993 pp 168-73.

⁷ MM, “Vorbereitungen zur chemischen Kampfführung”, *Österreichische Militär Zeitschrift*, 1986(6): 576; “Syria ‘is producing chemical weapons’”, *Jane’s Defence Weekly* vol 6 no 21, 29 November 1986, p 1255; Michael Eisenstadt, “Syria’s strategic weapons”, *Jane’s Intelligence Review*, vol 5 no 4, April 1993 pp 168-73.

⁸ Ye Primakov [Director RF Foreign Intelligence Service], “[A new challenge after the ‘Cold War’: The proliferation of weapons of mass destruction]”, Moscow 1993, as translated by JPRS and distributed by the US Senate Governmental Affairs Committee, 24 February 1993, at p 68. The USSR was once widely but wrongly perceived as the formative influence upon the Syrian programme – see, for example, USA, Director of Central Intelligence, Special National Intelligence Estimate, “Implication of Soviet use of chemical and toxin weapons for US security interests”, SNIE 11-17-83 of 15 September 1983. For nice speculation on Soviet influences on Syrian CW thinking, see Avigdor Haselkorn, “Moscow and the Syrian chemical warfare option”, presentation at the International Security Council, Jerusalem, 19-21 October 1986, pp 93-102 in the proceedings volume (1987). For a most instructive critical review of the open literature on Syrian CW and other WMD capabilities, see: Magnus Normark, Anders Lindblad, Anders Norqvist, Björn Sandström and Louise Waldenström, “Syria and WMD incentives and capabilities”, FOI Swedish Defence Research Agency user report FOI-R—1290—SE, June 2004.

⁹ Suhaylah Nazmi (from Alexandria), *Al-Ahram* (Cairo), 27 November 1996, p 8, “[The Syrian ambassador declares in Alexandria: Syria capable of retaliating with chemical weapons if Israel threatens it with nuclear ones]”, as translated from the Arabic in FBIS-NES-96-233, 27 November 1996, via FedWorld.

¹⁰ See, for example, James Phillips and James Jay Carafano, “Syrian WMD: counter-proliferation contingency planning needed”, 24 February 2012, www.heritage.org/research/reports/2012/02/syria-and-weapons-of-mass-destruction..., via BWPP DF; and

Jordan, Lebanon and Saudi Arabia about the possibility of Syrian chemical weapons crossing their borders, and is said to be offering US government help in dealing with the problem.¹¹

[C5] 13 July 2012. Unidentified US officials tell *The Wall Street Journal* that the United States has new intelligence to the effect that Syria has begun moving chemical weapons out of their existing storage facilities either in preparation for use against the rebels or to safeguard the weapons against capture.¹² The newspaper story is widely reported.

[C6] 23 July 2012. Syrian Foreign Ministry spokesman Jihad Makdissi reads a prepared statement during a live televised news conference in Damascus that contains, in Arabic, the following: “Any stock of WMD or unconventional weapons that the Syrian Army possesses will never, never be used against the Syrian people or civilians during this crisis, under any circumstances. These weapons are made to be used strictly and only in the event of external aggression against the Syrian Arab Republic.”¹³

[C7] 20 August 2012. President Obama speaks as follows during an impromptu news conference at the Washington, DC, White House: “We have been very clear to the Assad regime, but also to other players on the ground, that a red line for us is we start seeing a whole bunch of chemical weapons moving around or being utilized. That would change my calculus [regarding US military engagement with Syria]. That would change my equation. ... We have put together a range of contingency plans. We have communicated in no uncertain terms with every player in the region that that’s a red line for us and that there would be enormous consequences if we start seeing movement on the chemical weapons front or the use of chemical weapons. That would change my calculations significantly.”¹⁴

[C8] 3 December 2012. US President Obama says, in a much publicized speech: “I want to make it absolutely clear to Assad and those under his command: The world is watching. The use of chemical weapons is and would be totally unacceptable. And if you make the tragic mistake of using these weapons, there will be consequences, and you will be held accountable.”¹⁵

[C9] 27 April 2013. The Dubai-based television news channel *Al Arabiya* airs excerpts from an interview with a Syrian army defector, Brigadier Zaher Al-Saket, described as “former head of chemical warfare in the 5th division”. Here are some of his words: “When the demonstrations started, the regime used harassing agents, like any country in the world using tear gas to disperse demonstrations. As for [other types of chemical weapon] ... the regime used

Charles P Blair, “Fearful of a nuclear Iran? The real WMD nightmare is Syria”, 1 March 2012, <http://thebulletin.org/print/web-edition/op-eds/fearful-of-nuclear-iran...>

¹¹ Josh Rogin, “Exclusive: State Department quietly warning region on Syrian WMDs”, 1503 hrs 24 February 2012, http://the.cable.foreignpolicy.com/posts/2012/02/24/exclusive_state_department_quietly_warning..., via BWPP DF.

¹² Julian E Barnes, Jay Solomon and Adam Entous (from Washington), “US concerned as Syria moves chemical stockpile”, 1012 hrs ET 13 July 2012, <http://online.wsj.com/article/SB10001424052702303644004577523251596963194.html>, via BWPP DF.

¹³ Neil MacFarquhar and Eric Schmitt (from Beirut), “Syria threatens chemical attack on foreign force”, 23 July corrected 25 July 2012, www.nytimes.com/2012/07/24/world/middleeast/chemical-weapons-wont-be..., accessed 26 July 2012.

¹⁴ ‘Obama warns Syria chemical weapons use may spark US action’, 0135 hrs GMT 21 August 2013, www.bbc.co.uk/news/world-middle-east-19319446, via BWPP DF; Jeffrey Lewis, “Deterring Syria’s CW”, 21 August 2012, <http://lewis.armscontrolwonk.com/archive/5598/deterring-syrias-cw>, via BWPP DF.

¹⁵ See Mary Beth Nikitin, Andrew Feickert and Paul K Kerr, “Syria’s chemical weapons: Issues for Congress”, *CRS Report for Congress* 7-5700 R42848, 5 December 2012.

incapacitating agents at first, but when the world remained silent about this, and the regime thought that the international community did not care, it used lethal weapons in more than 13 locations. The last incident was in Utaybah. The regime used sarin gas on three occasions, and I am increasingly afraid they will use agents more powerful than sarin. They have VX gas and mustard gas ... I was given an order to use these substances [binary reactants for chemical weapons], but I replaced them with liquid bleach. This was the reason for my defection from Al-Assad's army. ... In the Amoud Horan battle in Busra Al-Harir, I was given an order to launch toxic agents into the trenches and caves to which the FSA was heading. But, Allah be praised, I replaced this substance with liquid bleach, which I diluted with water and launched into the trenches. ... In Utaybah, near the Damascus international airport, the regime used sarin gas three times, because it is close to the airport. The next time chemical weapons were used was in Khan Al-Assal. First they used incapacitating agents, and then they used lethal agents, because the FSA forces had managed to reach the military academy, which is the main regime stronghold.”¹⁶

[C10] 23 May 2013. The Qatar-based television network *Al Jazeera* reports what it had learnt about Syria's CW intentions from a scientist whom it does not identify but who had formerly been employed by Syria's main weapons-development institution, the Centre for Scientific Studies and Research. The scientist, who had fled Syria prior to 23 December 2012, had said that Syria possessed 700 tonnes of sarin nerve-gas, enough to “eradicate the whole of Damascus, Homs, Hama, and Aleppo”, as well as at least 3000 aircraft bombs and more than 100 Scud missile warheads that could be uploaded with sarin. He had also said: “If the regime is to fire a Scud-B with a chemical warhead filled with sarin, the missile would create a chemical cloud in the atmosphere that is 3km long and 500m wide, which could be fatal to all people under it.” But he said that the regime was unlikely to unleash its chemical stockpiles unless it “no longer cares about the world knowing”. So far it had used sarin only in small quantities to halt rebel advances; that was on four occasions – in the suburbs of Damascus, in the Sheikh Maksoud district of Aleppo, in the al-Khalidiyah district of Homs, and at Saraqeb in the Idlib governorate. “The intention was to incapacitate rebels and force them out of strategic areas, while keeping the deaths among their ranks limited”. The present doctrine for using chemical weapons he said had been formulated in December 2012. There had been attention to ways of inducing a mélange of symptoms that would make it difficult for observers to identify their cause; this had involved experimentation with different mixtures of chemical agents, such as sarin plus tear gas. The scientist had said to Al Jazeera: “When opposition activists report different kinds of symptoms resulting from the different gases, it becomes hard to believe them.”¹⁷

[C11] 27 May 2013. The Council of the European Union decides against renewing the arms embargo on the Syrian opposition, which is due to expire on 1 June.¹⁸ Britain and France have thus prevailed, after much acrimony.¹⁹

¹⁶ Zaher Al-Saket, interview broadcast on Al-Arabiya TV on 27 April 2013, transcript as excerpted and translated in “Defecting Syrian Officer Brigadier-General Zaher Al-Saket: I was ordered to use chemical weapons”, The Middle East Media Research Institute (MEMRI) clip no 3822, 27 April 2013, www.memritv.com/clip_transcript/en/3822.htm# via BWPP DF.

¹⁷ “Insider sheds light on Syria's chemical arms”, 23 May 2013, <http://m.aljazeera.com/story/2013523155639566436>.

¹⁸ The Council of the European Union, 3241st Foreign Affairs Council meeting, Brussels, 27 May 2013, Council declaration on Syria, via www.consilium.europa.eu/Newsroom.

¹⁹ Joshua Chaffin (in Brussels) for the London *Financial Times*, “UK and France win battle to lift EU's Syria arms embargo”, 1023 hrs 28 May 2013, www.ft.com/cms/s/0/095e5e50-c6c1-11e2-8a36-00144feab7de.html, accessed 18 June 2013.

[C12] 29 May 2013. First public indications that significant quantities of sarin nerve gas may be available to non-state actors in Syria and across the border in Turkey. Thus, in Adana (about 150 km from the Syrian border), Turkish police reportedly seize two kilograms of sarin from the home of a suspected member of Syrian Al-Qa'idah affiliate, the Al-Nusrah Front.²⁰ On 1 June, SANA – the Syrian state news agency – announces that, in the al-Faraieh neighbourhood of Hama, the army had seized two cylinders of sarin after raiding “a rebels’ den”.²¹

[C13] 4 June 2013. The UN Independent International Commission of Inquiry on the Syrian Arab Republic publishes its latest report, covering the period 15 January to 15 May 2013. Paragraphs 139-140 reads as follows: “Allegations have been received concerning the use of chemical weapons by both parties [to the conflict in Syria]. The majority concern their use by Government forces. In four attacks – on Khan Al-Asal, Aleppo, 19 March; Uteibah, Damascus, 19 March; Sheikh Maqsood neighbourhood, Aleppo, 13 April; and Saraqib, Idlib, 29 April – there are reasonable grounds to believe that limited quantities of toxic chemicals were used. It has not been possible, on the evidence available, to determine the precise chemical agents used, their delivery systems or the perpetrator. Other incidents also remain under investigation. Conclusive findings – particularly in the absence of a large-scale attack – may be reached only after testing samples taken directly from victims or the site of the alleged attack. It is, therefore, of utmost importance that the Panel of Experts, led by Professor Sellström and assembled under the Secretary General’s Mechanism for Investigation of Alleged Use of Chemical and Biological Weapons, is granted full access to Syria.”²²

On 5 May 2013, one of the four Commissioners, Carla Del Ponte, had said during a television interview that the Commission’s investigators, whose [internal] report of the previous week she had just seen, have “strong, concrete suspicions but not yet incontrovertible proof of the use of sarin gas, from the way the victims were treated”, and she continued: “This was use on the part of the opposition, the rebels, not by the government authorities.”²³ Reacting, it seems, to commentators who chose to portray this statement as an accusation of the rebels, the UN Office of the High Commissioner for Human Rights next day issued a press release observing that the Independent International Commission “has not reached conclusive findings as to the use of chemical weapons in Syria by any parties to the conflict” and is therefore “not in a position to further comment on the allegations at this time”.²⁴

[C14] 17 June 2013. With the G8 Summit just about to begin and with likely US-Russia disharmony on the goals for Syria that the Summit will be addressing, President Obama speaks as follows during a 45-minute interview by Charlie Rose on PBS television: “The goals are a stable non-sectarian representative Syrian government that is addressing the needs of its

²⁰ *Today’s Zaman* (Istanbul), 30 May 2013, “Report: Police foil al-Nusra bomb attack planned for Adana”, as posted on www.todayszaman.com/.

²¹ Xinhua from Damascus, 0520 hrs 2 June 2013, “Syrian army captures sarin containers with rebels in Hama”, http://news.xinhuanet.com/English/world/2013-06/02/c_132424652.htm, via BWPP DF.

²² UN Human Rights Council, 23rd session, “Report of the Independent International Commission of Inquiry on the Syrian Arab Republic”, advance unedited version, UN document A/HRC/23/58 dated 4 June 2013.

²³ Reuters from Geneva, 5 May 2013, www.nytimes.com/2013/05/06/world/middleeast/syrian-rebels-may-have-used-sarin.html, via BWPP DF.

²⁴ United Nations, Office of the High Commissioner for Human Rights, press release, Geneva, 6 May 2013, “Press release from the Commission of Inquiry on Syria (chemical weapons)”, as posted on www.ohcr.org.

people through political processes and peaceful processes. We're not taking sides in a religious war between Shia and Sunni. Really what we're trying to do is take sides against extremists of all sorts and in favor of people who are in favor of moderation, tolerance, representative government and over the long term stability and prosperity for the people of Syria. And so my goal — we've been supporting an opposition. We've been trying to help the opposition along with our international partners help the opposition become more cohesive. We've been assisting not only the political opposition but also the military opposition so that there is a counterweight that *can potentially lead to political negotiations with the evidence of chemical weapons* [emphasis added]. What we've said is we're going to ramp up that assistance. And my hope continues to be, however, that we resolve this through some sort of political transition.”²⁵

[C15] 17-18 June 2013. G8 summit in the UK at Lough Erne. At its close, the leaders of Canada, France, Germany, Italy, Japan, Russia, the UK and the USA issue a communiqué that, at paragraph 87, states the following: “We condemn any use of chemical weapons in Syria and call on all parties to the conflict to allow access to the UN investigating team mandated by the UN Secretary-General, and drawing on the expertise of the Organisation for the Prohibition of Chemical Weapons (OPCW) and the World Health Organisation (WHO), in order to conduct an objective investigation into reports of use of chemical weapons. The UN team should make their report and deliver it to the UN Security Council for their assessment. We are determined that those who may be found responsible for the use of chemical weapons will be held accountable. We emphasise the need for the secure and safe storage of all chemical weapons in Syria, pending their destruction under international verification. We also condemn in the strongest possible terms all human rights violations and abuses in Syria, committed by anyone, including indiscriminate attacks on civilians. We call on all sides to respect international humanitarian and human rights laws, noting the particular responsibility of the Syrian authorities in this regard.”

Now follow the CW allegations themselves, starting, in chronological order, with records of incidents inside Syria in which use of chemical weapons has been alleged, but (in most cases) only those incidents for which date and place have been specified. These are the records numbered L1 through L19 below. Unlocated allegations have in most cases been ignored, with one set of exceptions: allegations made by or on behalf of Western governments, which at first contained virtually no date/place information but later included a few such data. These governmental allegations are treated later, in records U1 through U10 below.

[L1] February 1982, Hama: Use by the regime. In November 1983, Amnesty International publishes this allegation, which it says is based on “news reports and information received”. The allegation is one of many apparent human rights violations recorded in the *Report from Amnesty International to the Government of the Syrian Arab Republic* that had been based on a

²⁵ Max Fisher, “Obama’s doctrine on Syria: ‘What we’re trying to do is take sides against extremists’”, 18 June 2013, www.washingtonpost.com/blogs/worldviews/wp/2013/06/18/obamas-doctrine-on-syria-what-were-trying-to-do-is-take-sides-against-extremists/, via BWPP DF

memorandum submitted to President Hafez al-Assad on 26 April 1983.²⁶ Amnesty states that the city of Hama had, on 2 February 1982, been sealed off by a government force of 6,000 to 8,000 regular soldiers and that, by the end of the month, this force had suppressed an insurgency by armed *Mujahideen*, tens of thousands of people being killed in the process. “It is difficult to establish for certain what happened”, says the report, “but Amnesty International has heard that [among much else] ... cyanide gas containers were ... brought into the city, connected by rubber pipes to the entrances of buildings believed to house insurgents and turned on, killing all the buildings’ occupants”. The report gives no further detail.

In August 2012, a “former senior intelligence analyst in the Israeli Defence Forces” writes of President Hafez Assad having “ordered the massacre in 1982 of approximately 18,000 Sunnis in Hama with cyanide gas”; the writer, Dany Shoham, gives no sources for this information.²⁷

In December 2012, British journalist Robert Fisk blogs thus: “I happened to have got into Hama in February 1982 ... and while Hafez’s Syrian army was very definitely slaughtering its own people (who were, by the way, slaughtering regime officials and their families), no one ever used chemical weapons. Not a single soldier I saw in Hama carried a gas mask. No civilians carried gas masks. The dangerously perfumed air which I and my colleagues smelt after chemicals were used by our (then) ally Saddam against Iranian soldiers in the 1980s was not present. And none of the dozens of civilian survivors I have interviewed in the 30 years since 1982 ever mentioned the use of gas. But now we are to believe that it was used. And so the infantile new fairy tale has begun: Hafez al-Assad used gas against his own people in Hama 30 years ago. So his son Bashar may do the same again. And wasn’t that one of the reasons we invaded Iraq in 2003 – because Saddam had used gas against his own people already and may do so again? Bunkum.”²⁸

{*Editorial comment:* In his book *Pity the Nation* (1990), Fisk had written that his February 1982 visit to Hama had been “only the most cursory, the briefest of visits”;²⁹ not occasion, therefore, some have since commented, for very much exploratory reporting, at least not at that time.}

[L2] February 2012, Homs (Bab Amr): Use by the regime. On 21 February 2012, Istanbul *Hürriyet Daily News* reports having just been told by Lt Abdulselam Abdulrezzak, “who used to work in the chemical weapons department in the Syrian army and defected to Turkey last week”, that “chemical weapons were used against civilians during the military offensive of the Syrian security forces in Bab Amr [a neighbourhood in Homs]”. The newspaper quotes Abdulrezzak thus: “BZ-CS, Chlorine Benzilate, which damages people’s nerves and makes

²⁶ *Report from Amnesty International to the Government of the Syrian Arab Republic*, AI index MDE 24/04/83, London: Amnesty International, November 1983, at p 37.

²⁷ Lt-Col (res) Dr Dany Shoham, “The fate of Syria’s chemical and biological weapons”, *BESA Center Perspectives Paper* no 177, as posted 1252 hrs 7 August 2012 on www.israelnationalnews.com/Articles/Articles.aspx/12022#.UCNZqqPcaSp, via BWPP DF; see also Yaakov Katz, *The Jerusalem Post*, 14 June 2012, “Security and defense: chemically unstable. Syria’s chemical weapons program has been focus of Israeli intelligence operations since the mid-1970s”.

²⁸ Robert Fisk, “Bashar al-Assad, Syria, and the truth about chemical weapons” as posted on www.independent.co.uk/voices/comment/bashar-al-assad-syria-and-the-truth-about-chemical-weapons-8393539.html, 8 December 2012.

²⁹ Robert Fisk, *Pity the Nation: Lebanon at War*, London: André Deutsch, 1990. The quote here is to be found on page 186 of the third edition (Oxford University Press, 2001).

them fade away, is being used in Bab Amr. They wanted to also use it in Zabadani [on the Lebanese border] but they made an agreement with the Free Syrian Army forces at the last minute and they backtracked. I couldn't stand all these and ran away." Interviewed on 19 February, Abdulrezzak had shown his Syrian army ID. The newspaper also reports him as saying that "Syrian soldiers were given gas masks recently in order to protect themselves from the chemical weapons that would be used against the protestors in Syria".³⁰

A video said to have been filmed at a hospital in Homs on 6 April 2012 and distributed by networks supporting the Syrian opposition shows a doctor displaying a video of a patient and denouncing "the use of chemical or biological weapons against the civilian population of Baba Amro, a neighbourhood which has remained for months in rebel hands, and so was heavily bombed by the Syrian army". The doctor refers to twelve cases, including two people who died, and explains: "After leaving the district of Baba Amro, these patients started with systemic symptoms such as neuropathy, arthralgia, joint pains, amnesia, skin rashes, hair loss and abdominal pain. These patients started with these symptoms after leaving Baba Amro, in 3 or 4 days."³¹

{*Editorial comment:* In the open literature on Syrian chemical-weapons capability, this allegation seems to be the first occasion that incapacitating agent BZ has been mentioned as an element of Syrian capability, whether on its own or in admixture with harassing agent CS. Chemically, BZ is 3-quinuclidinyl benzilate and CS is *o*-chlorobenzalmalononitrile, so it is not obvious why 'BZ-CS' should have been glossed as 'Chlorine Benzilate'. Nor is it obvious that either agent would have brought about the signs and symptoms described.}

[L3] 23 December 2012, Homs: Use by the regime. On 24 December 2012, the Qatar-based satellite television network *Al Jazeera* reports that chemicals had been used the day previously in a government attack on rebels holding the al-Bayyada neighbourhood in Homs, and that scores of people had been poisoned. Raji Rahmet Rabbou, an activist in Homs, had spoken to the network thus: "The situation is very difficult. We do not have enough face masks. We don't know what this gas is, but medics are saying it's something similar to sarin gas." Victims were nauseated and had "relaxed muscles", blurry vision, and difficulty breathing; seven people had been killed. Rebels had released videos of the casualties.³² *Al Jazeera* much later quotes a defecting Syrian weapons scientist [see record C10 above] as saying that the CW agent most likely to have been used in this incident was sarin diluted with isopropanol, which would have been consistent with a recently agreed employment doctrine that favoured, so the scientist reportedly said, the incapacitation of rebel units at key locations rather than seeking to kill rebels indiscriminately.³³

³⁰ Ipek Yezdani, *Hürriyet Daily News*, 21 February 2012, "Chemical weapons used against Syrians, says defected soldier", as posted at www.hurriyetaidailynews.com/PrintNews.aspx?PageID=383&NID=14223.

³¹ Daniel Iriarte from Istanbul, 1757 hrs 7 April 2012, "The Syrian opposition accuses the regime used chemical agents against civilians in Homs: a doctor shows a video of a patient allegedly affected by the component", as posted at www.abc.es/20120406/internacional/abci-siria-armas-quimicas-201204052254...

³² *Al Jazeera* as quoted by Ynetnews 0832 hrs 24 Dec 12, www.ynetnews.com/articles/0,7340,L-4323666,00.html, and by Raffi Khatchadourian on 16 January 2013 in www.newyorker.com/online/blogs/newsdesk/2013/01/the-case-of-agent-15-did-syria-use-a-nerve-agent.html.

³³ "Insider sheds light on Syria's chemical arms", 23 May 2013, <http://m.aljazeera.com/story/2013523155639566436>.

Also on 24 December, the US-based Humanitarian Resource Institute webposts the following report by the Syrian American Medical Society: “The regime shelled the neighbourhood of Al-Khaledeyya [close by Al-Bayyada] in the old city of Homs with chemical gas that led to the death of 7 people and impacted more than 50 people. The gas caused respiratory and neurologic symptoms and death. Doctors who treated the patients think that the gas used is Agent-15, that will lead to cholinergic effects that can be reversed by physostigmine. The treatment with atropine (the traditional antidote for cholinergic chemical weapons) may lead to worsening of symptoms. The gas effects started a few seconds after the area was shelled. Right after the shelling, patients described seeing white gas with odor then they had severe shortness of breath, loss of vision, inability to speak, flushed face, dizziness, paralysis, nausea and vomiting and increased respiratory secretions. Doctors who treated patients said that patients had pinpoint pupils and bronchospasm. Patients were treated in a field hospital. Gas masks were not available.”³⁴

On 15 January 2013, a senior staff writer with the US magazine *Foreign Policy*, Josh Rogin, blogs that a week previously the US Consul-General in Istanbul, Scott Frederic Killner, had reported in a secret cable to the State Department in Washington “the results of the consulate’s investigation into reports from inside Syria that chemical weapons had been used in the city of Homs on Dec 23”. Rogin writes that his source had been an Obama administration official who had reviewed the reporting cable, and he quotes that official thus: “We can’t definitely say 100 percent, but Syrian contacts made a compelling case that Agent 15 was used in Homs on Dec 23.” Rogin reports that the consulate’s investigation included “a series of interviews with activists, doctors, and defectors” and that the (unidentified) official had said it “was one of the most comprehensive efforts that the US government has made to investigate claims by internal Syrian sources”. Rogin continues: “The investigation included a meeting between the consulate staff and Mustafa al-Sheikh, a high-level defector who was once a major general in Assad’s army and key official in the Syrian military’s WMD program.” The blog is posted on *Foreign Policy* magazine’s *The Cable*.³⁵

Rogin’s blog also states that the consulate’s investigation “was facilitated by BASMA, an NGO the State Department has hired as one of its implementing partners inside Syria”. BASMA (on which Google seems to offer no information) had “connected consular officials with witnesses to the incident and other first-hand information”. The blog presents data from interviews with doctors said to have been on the alleged attack scene in Homs: “The doctors attributed five deaths and approximately 100 instances of severe respiratory, nervous system, and gastrointestinal ailments to the poison gas”. These ailments are described in some detail, albeit conflicting. Cited in the blog is an “Arabic-language report circulated by the rebels’ Homs medical committee”, a translation of which is made available soon afterwards; a recipient comments on it thus: “[T]he doctors’ diagnosis was ‘inhalation of large amounts of tear gas in closed-off places that were insufficiently ventilated’. However, they included exposure to ‘phosphorous compounds’ (probably meaning an organophosphate) in their differential diagnosis due to all of the patients presenting with ‘pin point pupils’. Except for the pinpoint

³⁴ www.humanitarian.net.idin/ref/1272012IDIN.html, via personal communication 24 December 2012. See also: Geoffrey Ingersoll and Robert Johnson, “Here’s what the ‘Agent-15’ chemical weapon probably used in Syria does to people”, 1345 hrs 24 December 2012, www.businessinsider.com/agent-15-chemical-weapon-used-in-syria-2012-12#ixzz2G2zEBRtM, via BWPP DF.

³⁵ Josh Rogin, 1745 hrs 15 January 2013, “Exclusive: secret State Department cable: chemical weapons used in Syria” posted at http://thecable.foreignpolicy.com/posts/2013/01/15/secret_state_department_cable_chemical_weapons_used_in_syria, via BWPP

pupils, the reported symptoms (headaches, dizzy-spells (i.e., almost passing out), shortness of breath, general body pains, redness and tearing of the eyes, pain in the throat, restlessness, and fainting, muscle cramps, etc.) sounds very much like exposure to CS (or a related tear gas).”³⁶

One of the doctors with whom Rogin had talked -- Dr Nashwan Abu Abdo, a neurologist speaking from an undisclosed location in Homs – stated that “the chemical agent was delivered by a tank shell”.³⁷

Reacting to the *Foreign Policy* blog on the day of its publication, US National Security Council spokesman Tommy Vietor tells reporters: “The reporting ... regarding alleged chemical weapons incidents in Syria has not been consistent with what we believe to be true about the Syrian chemical weapons program.”³⁸ According to a subsequent CNN blog quoting unidentified “senior US officials”, the consulate cable from Turkey had triggered more extensive investigation by the State Department, this resulting in a determination that the chemical used in Homs had actually been a riot control agent.³⁹ Shortly afterwards, the Paris *Le Monde* reports that Syrian forces had used non-lethal chemical weapons in the 23 December Homs incident, this information being attributed to unidentified “intelligence service sources” who had stated further that four rockets had disseminated the chemical agent .⁴⁰

On 23 March this alleged CW incident is included among those that both France and the UK now request the Secretary-General of the United Nations to investigate [see further records L7 and U1 below].⁴¹

In later reporting, Associated Press, which states that six rebels died in the attack, quotes eyewitness accounts that had described “white smoke” pouring from shells that “smelled ... like hydrochloric acid”.⁴²

In May 2013, the documented review of suspected CW incidents that the London-based Syrian Network for Human Rights now publishes provides much description of the alleged 23 December 2012 attack, which had “targeted Bayada and Deir Ba’lbeh in Homs”. The review says its account of the episode had been derived from survivors, eyewitnesses and hospital physicians, and it also includes links to many videos and pictures. It says, further, that there were 6 dead and at least 60 people injured.⁴³

³⁶ Personal communication, 16 January 2013.

³⁷ Josh Rogin, 1745 hrs 15 January 2013, “Exclusive: secret State Department cable: chemical weapons used in Syria” posted at http://thecable.foreignpolicy.com/posts/2013/01/15/secret_state_department_cable_chemical_weapons_used_in_syria, via BWPP DF.

³⁸ Reuters from Washington DC, 0629 hrs EST 16 Jan 13, “US plays down media report that Syria used chemical weapons”, www.reuters.com/article/2013/01/16/us-syria-usa-chemical-idUSBRE90F00P20130116, via BWPP DF.

³⁹ Elise Labott, “US: Syria didn’t use chemical weapons in Homs incident”, 1408 hrs ET 16 January 2013, <http://security.blogs.cnn.com/2013/01/16/u-s-syria-didnt-use-chemical-weapons-in-homs-incident>, via BWPP DF.

⁴⁰ *Le Monde* 19 January 2013, as reported in Reuters from Paris, 1721 hrs EST 19 Jan 13, www.reuters.com/article/2013/01/19/us-syria-chemical-newspaper-idUSBRE90I0JV20130119, via BWPP DF.

⁴¹ Reuters, 0636 hrs 4 May 2013, as in www.jpost.com/MiddleEast/Article.aspx?id=308775.

⁴² AP, as quoted by Peter Beaumont, “Syria nerve gas claims undermined by eyewitness accounts”, 2301 hrs BST 27 April 2013, *The Observer* (London) as at www.guardian.co.uk/world/2013/apr/28/syrian-nerve-gas-claims-eyewitness, via BWPP DF.

⁴³ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

{*Editorial comments:* (1) Cholinergic glycolates, such as ‘Agent 15’ is claimed to be, cause dilation of the pupils, not constriction, and the onset of their effects is typically delayed by minutes to hours, certainly not seconds. Miosis and rapid effect are, however, among the consequences that can be expected from exposure to ‘sarin gas’. (2) This CW-use allegation was initially made against a background of growing speculation that the Assad regime was on the verge of resort to its large arsenal of toxic weapons, and proved to be the precursor of many more. The ragbag symptomatology described, and especially the references to ‘Agent 15’,⁴⁴ suggest that the reporting includes at least some misinformation, if not outright disinformation. Nor can it be denied that, in the international and domestic politics of the intensifying civil war, there exist incentives to spread falsehoods or otherwise deceive opinion, a situation now much exacerbated by the “red line” utterances of the US administration [see records C6 and C7 above]. }

[L4] 25 December 2012, Homs (Zafarana): Use by the regime. The London-based Syrian Network for Human Rights states in its May 2013 documented review of suspected CW incidents that, on 25 December 2012 at Al-Zafranah village in north Homs, government forces had used the same “poisonous gas” as two days previously elsewhere in Homs [see record L3 above]: “These gases led to more than 20 suffocation conditions from residents, but we did not document any death case”. Three videos are linked in to this account.⁴⁵

[L5] Mid-January 2013, Qusayr (Jusiyah): Use by the regime. On 23 April 2013, unidentified “Syrian refugees and rebel fighters” are reported to have made this allegation. They had quoted “fighters who came to the assistance of their comrades”, who likewise are not identified by the US newspaper publishing the report, *The Christian Science Monitor*. These fighters had told the newspaper’s sources that they had found men lying “paralyzed on the ground, some choking and most unable to speak”, their incapacitation being attributed to “smoke from a bomb they believe was dropped by a passing jet”. This had allegedly happened during a night-time battle in mid-January in Jusiyah (a village a few kilometres south of the then-rebel-held town of Qusayr, some five miles north of the border with Lebanon). The newspaper describes the allegation as “unproven”.⁴⁶ There is no reference to any Qusayr episode in the documented review of suspected CW incidents that the London-based Syrian Network for Human Rights publishes in May 2013.⁴⁷

{Striking absence of alleged CW incidents during February 2013}

⁴⁴ See the review of information on Agent 15 contained in the record for 9 February 1998 (reproduced in Appendix 2 below) in the current draft of J P Perry Robinson, *Disabling Chemical Weapons: A Documented Chronology of Events, 1945-2011*. See also the blog by Raffi Khatchadourian on 16 January 2013 in www.newyorker.com/online/blogs/newsdesk/2013/01/the-case-of-agent-15-did-syria-use-a-nerve-agent.html; and see further Jeffrey Lewis, 25 January 2013, “Buzz bomb: Why everyone’s wrong about Assad’s zombie gas”, www.foreignpolicy.com/articles/2013/01/25/buzz_bomb?...

⁴⁵ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

⁴⁶ Ariel Zirulnick, *Christian Science Monitor*, 23 April 2013, as posted on <http://news.yahoo.com/Israel-charges-syria-lethal-chemical-weapons-124157577.html>, via BWPP.

⁴⁷ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

[L6] 14 March 2013 and later, into April, Damascus (Otaiba): Use by the regime. The Paris *Le Monde* reports, on 27 May 2013, a two-month field investigation by two of its staff⁴⁸ who had based themselves with FSA forces in the Damascus region and had received numerous accounts of CW employment by the regime. The earliest of these that the newspaper now relates seemingly took place in Otaiba on 14 March, this being the date on which a video was said to have been shot by cellphone that showed a man suffocating after an apparent CW attack. The newspapermen were shown several such videos on 8 April by doctors at a hospital in the Ghouta region (Otaiba lies to the east of Ghouta, which itself is just east of Damascus: a battle zone in which government forces had been conducting a large-scale operation since mid-March aimed at surrounding rebels and cutting their supply lines.) One of the doctors is reported as follows: “The patients who arrive here have trouble breathing. Their pupils are constricted. Some are vomiting. They’ve lost their hearing, they cannot speak, their respiratory muscles have been inert. If we don’t give them immediate emergency treatment, death ensues.” The gist of this description is repeated in several others the newspapermen say they had heard during their investigation. In all, they reported visiting eight medical centres in the eastern part of the Ghouta region, in only two of which doctors said they had not seen patients apparently affected by chemical weapons. On a single day – 18 March 2013 – doctors at Nashibayya recalled the admission of some 60 cases from the Otaiba front, five of which had terminated in death from suffocation.⁴⁹

In other reporting – by BBC News on 17 May – activists had on 19 March uploaded videos purporting to show victims of a CW bombardment in the village of Al-Otaybeh near Damascus, possibly in reprisal for rebel successes in the area the day previously.⁵⁰

A 19 March episode in Al-Otaiba town is included in the documented review of suspected CW incidents that the London-based Syrian Network for Human Rights publishes in May 2013, citing accounts obtained from survivors, eyewitnesses and hospital physicians. The review states that “at approximately 11 AM, Syrian Government’s Armed Forces bombed Al Otaiba by missiles carried toxic warhead, it led to the spread of clouds of gas after explosion”. Five (named) residents are reported dead and more than 60 injured, “[t]hey suffered from suffocation, respiratory failure, haemoptysis, severe drop in blood pressure, nervous and peripheral convulsions, myosis”. There are links to video testimony by a survivor and by a doctor who had treated victims. Also included in the review is mention of a later incident, in which “three missiles carrying chemical materials” were said to have been fired against Al-Otaiba by government forces on 9 April; animals died, but not people.⁵¹

[L7] 19 March 2013, Aleppo (Khan al-Assal): Use by rebels and/or the regime. On 19 March 2013, the Syrian state news agency SANA announces that terrorists had that day fired a rocket “containing chemical materials” into the Khan al-Assal area of Aleppo, killing many. The allegation is repeated by government spokesmen on state television and elsewhere, and is

⁴⁸ Reporter Jean-Philippe Rémy and photographer Laurent van der Stockt.

⁴⁹ Jean-Philippe Rémy (from Jobar, Damascus), *Le Monde* (Paris), 0558 hrs 27 May 2013, English translation by Meg Bortin webposted at www.lemonde.fr/proche-orient/article/2013/05/27/chemical-war-in-syria_3417708_3218.html, via BWPP DF.

⁵⁰ BBC News, Middle East, 1933 hrs 17 May 2013, “Syria chemical weapons allegations”, www.bbc.co.uk/news/world-middle-east-22557347.

⁵¹ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

reported widely.⁵² Associated Press describes Khan al-Assal as an area just east of the city of Aleppo that had seen fierce fighting for weeks before rebels took over a sprawling government complex there during February.⁵³ Back in January, Anatolia (the Turkish state-run news agency) had been told by a political adviser to the Free Syrian Army, Bassam al-Dada, that the opposition had the raw materials and know-how to produce chemical weapons.⁵⁴

Syrian information minister Omran al-Zoubi describes the alleged attack as “the first act” of the opposition interim government led by Ghassan Hitto, the formation of which had been announced from Istanbul earlier in the day. He says that a missile containing “poisonous gases” had been fired from the Nairab district of Aleppo into Khan al-Assal.⁵⁵ SANA publishes photographs of men, women and children on hospital beds or stretchers who it says are civilian victims of the attack it is reporting. SANA states that 25 people had been killed and a further 86 wounded, most of them seriously, and it quotes a Reuters photographer as saying that the victims he had visited in Aleppo hospitals had difficulties breathing: “I saw mostly women and children. They said that people were suffocating in the streets and the air smelt strongly of chlorine.” The SANA photographs show victims hooked up to drips or otherwise under the care of medics.⁵⁶ One commentator observes that these people show no outward signs of CW attack: “Definitely not mustard; definitely not a nerve agent”.⁵⁷ The official death toll later rises to 31.⁵⁸

Rebels deny the allegation and accuse regime forces of having themselves fired a chemical missile into Khan al-Assal.⁵⁹ This charge is made by the Aleppo Media Centre, which acknowledges that there had been cases of “suffocation and poison” among civilians in Khan al-Assal after a surface-to-surface missile had landed in the area, but in its statement adds that the cases were “most likely” caused by use of “poisonous gases” by forces of the regime.⁶⁰ The UK-based Syrian Observatory for Human Rights reportedly quotes activists saying that government forces had tried to hit the now-rebel-held police academy in Khan al-Assal with a Scud missile, which had, however, landed in a government-controlled area instead.⁶¹

⁵² BBC News, 1105 hrs GMT 19 March 2013, www.bbc.co.uk/news/world-middle-east-21841217; Anne Barnard, 19 March 2013, www.nytimes.com/2013/03/20/world/middleeast/syria-developments.html...; AP from Damascus, 1404 hrs 19 March 2013, “Syrian government claims chemical weapon attack by rebels kills 16, rebels say regime did it” on Washingtonpost.com, all via BWPP.

⁵³ AP from Damascus, 1404 hrs 19 March 2013, “Syrian government claims chemical weapon attack by rebels kills 16, rebels say regime did it” on Washingtonpost.com, via BWPP.

⁵⁴ As quoted in *The Hindu*, 3 January 2013, “Can assemble chemical arms: Syrian rebels”.

⁵⁵ AP from Damascus, 1404 hrs 19 March 2013, “Syrian government claims chemical weapon attack by rebels kills 16, rebels say regime did it” on Washingtonpost.com via BWPP.

⁵⁶ Anne Barnard, 19 March 2013, www.nytimes.com/2013/03/20/world/middleeast/syria-developments.html..., via BWPP.

⁵⁷ J P Zanders, 19 March 2013, blog at <http://armscontrolaw.com/2013/03/19/chemical-warfare-allegations-in-syria-an-initial-assessment>.

⁵⁸ BBC News, Middle East, 1933 hrs 17 May 2013, “Syria chemical weapons allegations”, www.bbc.co.uk/news/world-middle-east-22557347.

⁵⁹ BBC News, 1105 hrs GMT 19 March 2013, www.bbc.co.uk/news/world-middle-east-21841217; Anne Barnard, 19 March 2013, www.nytimes.com/2013/03/20/world/middleeast/syria-developments.html...; AP from Damascus, 1404 hrs 19 March 2013, “Syrian government claims chemical weapon attack by rebels kills 16, rebels say regime did it” on Washingtonpost.com, all via BWPP.

⁶⁰ BBC News, 1105 hrs GMT 19 March 2013, www.bbc.co.uk/news/world-middle-east-21841217; AP from Damascus, 1404 hrs 19 March 2013, “Syrian government claims chemical weapon attack by rebels kills 16, rebels say regime did it” on Washingtonpost.com, both via BWPP.

⁶¹ Anne Barnard, 19 March 2013, www.nytimes.com/2013/03/20/world/middleeast/syria-developments.html..., via BWPP.

On 20 March, the Syrian government requests an investigation by the Secretary-General of the United Nations,⁶² reportedly furnishing him with blood and soil samples.⁶³ Next day the Secretary-General announces that, with cooperation from the WHO and the OPCW, he will indeed conduct an investigation.⁶⁴ Britain and France request that he also investigate all other allegations as well.⁶⁵ By 26 March an investigation team is established under the leadership of Professor Åke Sellström of Sweden,⁶⁶ though its access to Syria and sites therein remains to be negotiated.

The fact of each side accusing the other of responsibility for the apparent CW attack raises, as the *New York Times* later puts it, “a number of confusing possibilities: that the government was trying to frame its opponents; that it had accidentally attacked its own troops, who were among the victims; or that insurgent groups possessed chemical weapons and were willing to use them”.⁶⁷ On 23 March 2012, an unidentified “senior source close to the Syrian army” is quoted in the London *Daily Telegraph* as saying the Syrian military believes that – in the words of the newspaper -- “a home-made locally-manufactured rocket was fired, containing a form of chlorine known as CL17, easily available as a swimming pool cleaner”. The military is said to believe, also, that the rocket, a small one, had been fired from the district of Al-Bab at a military checkpoint situated at the entrance to the town.⁶⁸ *Time* magazine later reports that the only chlorine factory in Syria is located near Aleppo and had been taken by rebel forces in August 2012; the factory is now occupied by the militant group Jabhat al-Nusra that the US government has designated a terror group on account of its “strong ties to al Qaeda”.⁶⁹

On 6 May 2013, Fars News Agency reports that the attack on Khan al-Assal had been launched from the Nusra-controlled neighbourhood of Kafr Dael in northwestern Aleppo, and that the chemical used, disseminating sarin nerve-gas, had been supplied through Turkey by Brigadier Adnan al-Dulaimi, once “a key man in Saddam’s chemical weapons production projects” in Iraq. FNA adds: “The 80-mm mortar shells which landed in Khan al-Assal and killed dozens of people were armed with the latest product of Dulaimi’s hidden laboratories sent to the Nusra members for testing”. This information is said to have come from “an informed source, who asked to remain anonymous for fear of his life”.⁷⁰

⁶² “Letter dated 22 March 2013 from the Secretary-General addressed to the President of the Security Council”, UN Security Council document S/2013/184 dated 25 March 2013.

⁶³ Alex Thomson [Chief Correspondent, Channel 4 News], 1818 hrs GMT 23 March 2013, www.telegraph.co.uk/news/worldnews/middleeast/syria/9950036/Syria-chemical-weapons-finger-pointed-at-jihadists.html via BWPP DF.

⁶⁴ Ban Ki-moon – press encounter on Syrian Government request: Statement, 21 March 2013, <http://webtv.un.org/topics-issues/un-secretary-general/watch/ban-ki-moon-press-encounter-on-syrian-government-request/2241903792001#full-text>, via BWPP DF.

⁶⁵ Neil MacFarquhar from the UN, *New York Times*, 22 March 2013, “UN to investigate chemical weapons accusations in Syria”.

⁶⁶ “Ban appoints Swedish scientist to lead probe into alleged chemical weapons use in Syria”, 26 March 2013, as posted on www.un.org/, via BWPP DF.

⁶⁷ Kareem Fahim from Antakya, Turkey, 10 June 2013, www.nytimes.com/2013/06/11/world/middleeast/still-more-questions-than-answers-on-nerve-gas-in-syria.html, via BWPP DF.

⁶⁸ Alex Thomson [Chief Correspondent, Channel 4 News], 1818 hrs GMT 23 March 2013, www.telegraph.co.uk/news/worldnews/middleeast/syria/9950036/Syria-chemical-weapons-finger-pointed-at-jihadists.html, via BWPP DF.

⁶⁹ Aryn Baker, with Rami Aysha (from Beirut), 1 April 2013, <http://world.time.com/2013/04/01/syrias-civil-war-the-mystery-behind-a-deadly-chemical-attack/?iid=tsmodule>, via BWPP DF.

⁷⁰ Fars News Agency, “Saddam-era general supplying chemical weapons to terrorists in Syria”, as posted 1944 hrs 6 May 2013 on *Islamic Invitation Turkey* at www.islamicinvitationturkey.com/2013/05/06/saddam-era-general-supplying-chemical-weapons-to-terrorists-in-syria/, accessed 26 June 2013.

Also in May 2013 much additional purported detail of the episode is presented in the documented review of suspected CW incidents published then by the London-based Syrian Network for Human Rights, citing accounts obtained from survivors, eyewitnesses and hospital physicians. The review states that the “region was bombed ... at 3:45 am by military air forces, warplanes dropped missiles which exploded and fired fragments like sand to long distances”. The review states that the attack had resulted in 22 dead and 250 injured. The review quotes the testimony of, among others, Dr Nael Hariri who treated the injured in Aleppo University Hospital.⁷¹ The review notes that the victims of the attack were all people loyal to the regime, this possibly indicating that the area had been targeted by mistake.

On 10 June 2013, the *New York Times* quotes a Syrian pediatrician, Dr Yahia Abdul-Rahim, who had been on duty in an Aleppo hospital on 19 March and who now lives in the USA. He had told the newspaper that the hospital had suddenly filled up with patients, some vomiting, choking or sensitive to light; a few had responded to treatment for nerve-gas poisoning but at least two dozen others had died. Samples of blood taken from these Aleppo casualties reached the Turkish office of the Syrian American Medical Society some ten days after the alleged CW incident.⁷² The newspaper suggests that the samples contributed to those from which US chemical analysts would conclude that Syrian casualties from whom the samples had been taken had been exposed to sarin nerve gas.⁷³ The 14 June letter from the US government to the UN Secretary-General [see record U9 below] seems to confirm this, for, according to press-reporting, the letter says that the United States has determined that sarin was used in a 13 April attack on the neighbourhood of Shaykh Maqsud.⁷⁴

[L8] 24 March 2013, Adra: Use by the regime. The Local Co-ordination Committees, which is a network of activists, later state that two people had been killed and “dozens” injured on 24 March when the town of Adra (some 25 kilometres north-east of Damascus) was shelled with “chemical phosphorus” bombs. A video circulated by the opposition Shaam News Network appears to show doctors in a makeshift hospital in the town describing symptoms: convulsions, excess saliva, narrow pupils and vomiting.⁷⁵

A 24 March episode in Adra town is included in the documented review of suspected CW incidents that the London-based Syrian Network for Human Rights publishes in May 2013, citing accounts obtained from survivors, eyewitnesses and hospital physicians. The review states that “at almost 9 pm, forces of the Syrian army ... bombed Adra region by the missiles with chemicals warhead. It led to two victims, 6 injured with convulsion, and more than 38

⁷¹ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

⁷² Kareem Fahim from Antakya, Turkey, 10 June 2013, www.nytimes.com/2013/06/11/world/middleeast/still-more-questions-than-answers-on-nerve-gas-in-syria.html, via BWPP DF.

⁷³ Kareem Fahim from Antakya, Turkey, 10 June 2013, www.nytimes.com/2013/06/11/world/middleeast/still-more-questions-than-answers-on-nerve-gas-in-syria.html, via BWPP DF; and Mark Mazzetti, Michael R Gordon and Mark Landler (from Washington), “US is said to plan to send weapons to Syrian rebels”, 13 June 2013, www.nytimes.com/2013/06/14/world/middleeast/syria-chemical-weapons.html, via BWPP DF.

⁷⁴ Edith M Lederer for The Associated Press, 14 June 2013, “US letter: Syrian regime used chemical weapons agent sarin twice in Aleppo”, <http://ca.news.yahoo.com/un-chief-opposes-us-arms-syria-rebels-says-164659094.html> via BWPP DF.

⁷⁵ BBC News, Middle East, 1933 hrs 17 May 2013, “Syria chemical weapons allegations”, www.bbc.co.uk/news/world-middle-east-22557347.

injured from the region”. There are links to pictures and to video testimony by field-hospital doctor.⁷⁶

According to other reporting, by the Paris *Le Monde* on 27 May 2013, an apparent CW attack on Adra on 24 March resulted in the admission of 39 patients to a hospital in Douma, so doctors had subsequently told the newspaper.⁷⁷

According to Reuters two days after that *Le Monde* report, the UK government had, on 24 May, written to UN Secretary-General Ban Ki-moon with particulars of three suspected CW incidents additional to those described in its earlier communications, starting in March, and one of these was a 24 March incident in Adra, on which Reuters reported an unidentified “Western diplomat” thus: “In that incident, Syrian opposition campaigners said forces loyal to President Bashar al-Assad fired what they said were chemical weapons from multiple rocket launchers at rebel fighters surrounding an army base in the town of Adra on the outskirts of Damascus, killing two fighters and wounding 23.”⁷⁸

{*Editorial comment:* Nerve agents are phosphorus-containing chemicals, but conceivably the first of these reports, in its mention of ‘chemical phosphorus’, was referring to the incendiary-cum-smoke-cum-antipersonnel agent, elemental yellow phosphorus, known to the military around the world as White Phosphorus, whose use by the Syrian regime has been reported before, though without confirmation.⁷⁹ However, the effects on the human body of White Phosphorus are conspicuously absent from the description of the Shaam News video.}

[L9] 26 March 2013, Damascus (Darayya): Use by the regime. Commenting on the Aleppo (Khan al-Assal) episode of 19 March [see record L7 above], the spokesperson for the opposition Military Council of Aleppo, Kasem Saad Eddine, accuses the Syrian government of having launched a second chemical attack, causing an unspecified number of casualties near Damascus, so *Time* magazine reports on 1 April 2013 but without giving further detail.⁸⁰ Much later, on 23 May 2013, the Qatar-based television network *Al Jazeera* quotes the Darayya Local Council as having reported that, on 26 March, rockets with chemical heads fell on the town, leading to more than 40 cases of suffocation; other symptoms reported included allergy and severe nausea.⁸¹ Perhaps these two allegations are one and the same?

[L10] 6 April 2013 and later, Damascus (Jobar): Use by the regime. Video uploaded on 7 April 2013 purports to show victims of “Syrian regime bombs containing toxic substances” used the day previously in the Jobar neighbourhood of Damascus. There are pictures of

⁷⁶ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

⁷⁷ Jean-Philippe Rémy (from Jobar, Damascus), *Le Monde* (Paris), 0558 hrs 27 May 2013, English translation by Meg Bortin webposted at www.lemonde.fr/proche-orient/article/2013/05/27/chemical-war-in-syria_3417708_3218.html, via BWPP DF.

⁷⁸ Louis Charbonneau from the UN for Reuters, 1434 hrs EDT 29 May 2013, “UK says informed UN chief of more Syria chemical attacks”, www.reuters.com/article/2013/05/29/us-syria-crisis-un-idUSBRE94S15U20130529, via BWPP DF.

⁷⁹ Babak Dehghanpisheh, “Syria video purports to show use of white phosphorus”, 1118 hrs 6 December 2012, www.washingtonpost.com/blogs/worldviews/wp/2012/12/06/does-this-syria-video-reveal-the-use-of-chemical-weapons/ via BWPP DF.

⁸⁰ Aryn Baker, with Rami Aysha (from Beirut), 1 April 2013, <http://world.time.com/2013.04/01/syrias-civil-war-the-mystery-behind-a-deadly-chemical-attack/>, via BWPP DF.

⁸¹ “Alleged chemical weapons attacks”, linked into “Insider sheds light on Syria’s chemical arms”, 23 May 2013, <http://m.aljazeera.com/story/2013523155639566436>.

individuals with highly constricted pupils.⁸² The Paris *Le Monde* on 27 May describes Jobar as the sector where FSA rebel groups had penetrated most deeply into Damascus, suggesting that this penetration was the reason why its two-month-long investigation had found apparent CW episodes to be at their most frequent in the Jobar sector.⁸³ The newspaper says that the munitions used rarely indicated chemical release – no smell, no smoke, a “small sound” only – until their effects set in: “The men cough violently. Their eyes burn, their pupils shrink, their vision blurs. Soon they experience difficulty breathing, sometimes in the extreme; they begin to vomit or lose consciousness. The fighters worst affected need to be evacuated before they suffocate.” These reported words are those of an FSA brigade’s chief of operations, Omar Haidar. Similar happenings in Jobar are witnessed by *Le Monde* reporters “several days in a row”. The first such episode that the newspaper reported took place on 11 April, and in another episode two days later the *Le Monde* photographer experienced symptoms including blurred vision and respiratory difficulties that last for four days. Doctors speak of heavy and severe casualties occurring on 14 April; one Jobar fighter experiencing major respiratory problems and a heart-beat that had “gone wild” was saved only after 15 injections of atropine, plus hydrocortisone. An FSA divisional commander, Mohammad Al-Kurdi, tells the newspaper his men had seen government soldiers leave their position “wearing chemical protective suits” in order to set “little bombs, like mines” on the ground that began giving off a chemical product; the newspaper says, however, that it can provide no corroborative account. In the fifth Jobar episode reported, which occurred on 18 April, chemical was apparently dispensed from a munition that landed at the feet of FSA soldiers comprising a cylinder some 20 cm long equipped with an opening mechanism. Since that episode, gas-masks and atropine auto-injectors became available to rebel fighters, and biomedical samples were being taken from exposed fighters (see further below). During the second half of April, according to *Le Monde*, CW attacks “became almost routine”. An ophthalmologist in the region told the newspaper that, over a period of two weeks, he had seen 150 affected people. At clinics he had organized a system of showers to decontaminate incoming patients lest their clothing contaminate health workers.

In other reporting, apparent CW incidents in Jobar on 7 and 14 April are included in the documented review of suspected CW incidents that the London-based Syrian Network for Human Rights had published earlier in May 2013.⁸⁴

Samples acquired by the *Le Monde* reporters, brought out on 12 and 14 May, are among those later analysed at the French CBW defence establishment at Le Bouchet. Apparently obtained from doctors at medical centres in or near Jobar, the samples were biomedical (urine, blood and hair) and of clothing. It is in the urine of three Jobar casualties that Le Bouchet subsequently detects IMPA – isopropyl methylphosphonic acid, a chemical whose presence in the urine is virtually impossible to explain except as a metabolite of inhaled sarin, so that the IMPA is, in effect, a marker for the use of sarin⁸⁵ – at levels in the range 270-1140

⁸² www.youtube.com/watch?NR=1&feature=endscreen&v=l2sViQ4Do20, accessed 26 April 2013.

⁸³ Jean-Philippe Rémy (from Jobar, Damascus), *Le Monde* (Paris), 0558 hrs 27 May 2013, English translation by Meg Bortin webposted at www.lemonde.fr/proche-orient/article/2013/05/27/chemical-war-in-syria_3417708_3218.html, via BWPP DF.

⁸⁴ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

⁸⁵ Helen Carmichael, “French convinced sarin used in Syria”, 11 June 2013, www.rsc.org/chemistryworld/2013/06/french-sarin-detection-syria, via BWPP DF

ng/ml.⁸⁶ The newspaper had given its samples to the French government on the understanding that it would have access to the analytical findings. Le Bouchet had reportedly concentrated on nerve agents, meaning that neither tear gas nor choking agents had been looked for in the samples.⁸⁷

{*Editorial comment:* The account of its two-month investigation that *Le Monde* publishes includes interpretation as well as description. For example: “Gas is used on the battlefronts [Jobar among them] only from time to time, avoiding the kind of massive spread of toxic chemicals that would easily constitute irrefutable proof”. Elsewhere in the account, a tactical interpretation as well as that political one is offered for the seemingly small scale of CW use: “The gas was not diffused over a broad swath of territory but used occasionally in specific locations by government forces to attack the areas of toughest fighting with the encroaching opposition rebels”. The newspaper’s interpretations seem not invariably to have been independent of outside influence. For example: “According to a well-informed Western source, the Syrian authorities have gone so far as to use mixtures of chemicals, notably with the addition of tear gas, to make it harder to identify the source of the symptoms.” And tear gas, the *Le Monde* account says, “is used on all fronts”,⁸⁸ presumably including ones where its reporters are not present.}

[L11] 13/14 April 2013, Aleppo (Sheikh Maqsoud): Use by the regime. The Dubai-based television news channel *Al Arabiya* reports that chemical weapons had allegedly been dropped in a civilian area near Aleppo from a Syrian army helicopter during the night of 13/14 April, killing a woman and two children. The report, which seems to have originated from the US-based Syrian Expatriates Organization, states further that local physicians in the affected area – the Kurdish-controlled Sheikh Maqsoud neighbourhood of Aleppo -- reported that victims of the alleged chemical attack suffered hallucinations, vomiting, excess mucus and burning of the eyes.⁸⁹ On 27 April 2013, the Qatar-based television network *Al Jazeera* reports, without further detail, “Dr Niazi Habash, who treated victims of April 13 attack on civilians, says the symptoms indicated use of chemicals”.⁹⁰ On 30 April 2013, the US (Boston)-based *GlobalPost* reports on photographs and video it had “obtained ... at the scene” including pictures of the remains of a munition in the house of the dead woman and children; these showed a grenade-like device perhaps dropped from the helicopter locals said they had heard overhead just before the alleged attack during the very early hours of the morning of 14 April. Further, *GlobalPost* reports a police officer, Toul Haldun Zagroz, who had been part of the second aid team to

⁸⁶ Hélène Sallon, *Le Monde* online, 1011 hrs 5 June 2013, “[How ‘Le Monde’ obtained evidence of the use of chemical weapons in Syria]”, www.lemonde.fr/proche-orient/chat/2013/06/05/comment-le-monde-a-obtenu-des-preuves-de-l-usage-d-armes-chimiques-en-syrie_3424321_3218.html

⁸⁷ Hélène Sallon, *Le Monde* online, 1832 hrs 5 June 2013, “[Chemical weapons in Syria: ‘The indisputable and irrefutable evidence’]”, www.lemonde.fr/proche-orient/article/2013/06/05/armes-chimiques-en-syrie-des-preuves-indiscutables-et-irrefutables_3424661_3218.html; Hélène Sallon, *Le Monde* online, 1011 hrs 5 June 2013, “[How ‘Le Monde’ obtained evidence of the use of chemical weapons in Syria]”, www.lemonde.fr/proche-orient/chat/2013/06/05/comment-le-monde-a-obtenu-des-preuves-de-l-usage-d-armes-chimiques-en-syrie_3424321_3218.html; Natalie Nougayrède, *Le Monde* online, editorial, “[We can no longer say that we did not know]” www.lemonde.fr/proche-orient/article/2013/06/05/on-ne-pourra-plus-dire-que-l-on-ne-savait-pas_3424408_3218.html; and Ian Sample and Julian Borger, “Syria crisis: UK and France claim attack victims test positive for sarin”, 0805 hrs BST 5 June 2013, <http://m.guardian.co.uk/world/2013/jun/04/syria-nerve-agent-sarin...>

⁸⁸ Jean-Philippe Rémy (from Jobar, Damascus), *Le Monde* (Paris), 0558 hrs 27 May 2013, English translation by Meg Bortin webposted at www.lemonde.fr/proche-orient/article/2013/05/27/chemical-war-in-syria_3417708_3218.html, via BWPP DF.

⁸⁹ Jessica Limardo, 17 April 2013, www.bioprepwatch.com/weapons_of_bioterrorism/chemical-weapons-use-reported-in-syria/329387, via BWPP DF

⁹⁰ *Al Jazeera* 0111 hrs 27 Apr 13, www.aljazeera.com/news/middleeast/2013/04/201342617652960311.html, in the text distributed via BWPP DF, but not included in the text on that *Al Jazeera* URL as accessed on 21 May 2013.

arrive at the house, as follows: “There was a white powder covering the stairs, but there was no smell or smoke. It did not even occur to me that it might be a chemical, but when we went inside we saw the children dead and the Kurdish police who had arrived before us were on the ground foaming something white from their mouth. Their eyes were so red.” The *GlobalPost* report goes on to say that Zagroz himself would suffer similar symptoms: half an hour after entering the premises, he had to be taken to hospital afflicted by dizziness, severe headache, blurred vision and stomach pain. That same hospital, at Afrin about 40 miles distant, had already received 22 victims of the attack, a subsequent medical report from the hospital stating that these patients had been unconscious or semiconscious, trembling and foaming from the mouth and nose; one died after arrival but the others recovered within five days. Several doctors at the hospital were reportedly affected also. *GlobalPost* comments on the difficulty of concluding very much from such information about the identity of any chemical weapon that might have been responsible. It notes that some of the reported signs and symptoms were consistent with poisoning by a nerve gas such as sarin, but it also notes that some such tell-tale signs had not been observed, notably the miosis (pinpointing of the pupils) indicative even of slight exposure to nerve agent.⁹¹

The episode is among those described in the documented review of suspected CW incidents that the London-based Syrian Network for Human Rights publishes in May 2013, citing accounts obtained from survivors, eyewitnesses and hospital physicians. In addition to medical particulars, identification of dead and injured, and links to pictures and videos, the review describes the attack thus: “Helicopter belonging to Syrian Government’s Air Force ... dropped two poison gas bombs on Sheikh Maksoud... The bombs are metal cans fairly like conservers with plastic cans inside contains toxic materials turn into gases. It also featured with safety valves. These bombs led to 5 victims, including two infants, more than 12 injuries cause on inhaling the poisonous gas, transferred to Afrin for treatment.”⁹²

On 13 June 2013 the US Deputy National Security Advisor for Strategic Communications, Ben Rhodes, identifies “an April 13th attack ... in the Aleppo area in the neighbourhood of Sheikh Maqsood” as one of four incidents associated with the new “high-confidence assessment” of the US intelligence community that Syria has been using chemical weapons,⁹³ sarin on this occasion.⁹⁴

[L12] 17 April 2013, Damascus (Ain Tarma): Use by the regime. Citing a video showing the incident, the London-based Syrian Network for Human Rights writes, in its May 2013 documented review of suspected CW incidents,⁹⁵ as follows: “Syrian ... Armed Forces shelled

⁹¹ Tracey Shelton and Peter Gelling, 1549 hrs 30 April 2013, www.globalpost.com/dispatch/news/regions/middleeast/syria/130430/syria-chemical-weapons-attack-aleppo-sheikh-magsoud-april-13-assad-obama-fsa, via BWPP DF.

⁹² “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

⁹³ The White House, Office of the Press Secretary, 1716-1748 hrs EDT 13 June 2013, “On-the-Record Conference Call by Deputy National Security Advisor for Strategic Communications Ben Rhodes on Syria”, www.whitehouse.gov/the-press-office/2013/06/13/record-conference-call-deputy-national-security-advisor/strategic-commun.

⁹⁴ Edith M Lederer for The Associated Press, 14 June 2013, “US letter: Syrian regime used chemical weapons agent sarin twice in Aleppo”, <http://ca.news.yahoo.com/un-chief-opposes-us-arms-syria-rebels-says-164659094.html> via BWPP DF.

⁹⁵ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

Ain Tarma town in Damascus countryside with poisonous gases bombs after clashes between FSA where they could hit a military checkpoint centred at the entrance of the town. Syrian Government's Armed Forces reply with quick revenge by using poisonous gases, led to 1 victim killed and 8 injuries (free army and civilians).”

[L13] 25 April 2013, Daraya: Use by the regime. A resident named Mohanad in the Damascus suburb of Daraya is quoted as follows by the London-based Syrian Network for Human Rights in its May 2013 review of suspected CW incidents:⁹⁶ “On Wednesday evening in April 25, 2013, Syrian Government's Armed Forces shelled the city with two surface to surface missiles, shell targeted the southern area of the city and spread on a large scale not a small, you can say almost two square kilometres. ... Missile was almost 500 meter away from us, we thought it is as usual shelling, didn't care, for us it is usual and frequently, this is the war waged by Syrian regime on us, shortly thereafter symptoms appeared: breath shortness, body spasm, corestenoma, then we transferred to field hospital and get cure by the doctor there, no body killed thanks God. Animal and livestock in the area died, the cow that didn't die their milk turned to green. Dozens of the residents witnesses the incident cause the launching was in the dark night ...” Linked-in to the review are videos of the attack and also the video testimony of a physician who had examined a casualty.

In other reporting, on 22 May 2013, the US on-line *The Daily Beast* describes “activists and medical professionals” pointing to “an April attack in the city of Daraya”.⁹⁷

On 29 May 2013, Reuters reports that the UK government had, on 24 May, written to UN Secretary-General Ban Ki-moon with particulars of three suspected CW incidents additional to those described in its earlier communications on the same subject, starting in March. One of these, according to an unidentified “Western diplomat” quoted by Reuters, was a 25 April incident in Daraya, a suburb of Damascus.⁹⁸

[L14] 27 April 2013, Aleppo (Kueres military airport): Use by the regime. An eye-witness named Yousef Satouf, described as “a media activist and resident in that area, still alive” and available on Skype, is quoted as follows by the London-based Syrian Network for Human Rights in its May 2013 review of suspected CW incidents:⁹⁹ “During clashes there is shelling, Saturday [27 April 2013] almost 1.00 PM artillery shells Free Syrian Army centers, the shell turned into gas immediately when it explode, some suffocation to death as they inhale the gas and others transferred to field hospital near the airport, injuries have signs poisoning, suffocation, and allergic symptoms heavy runny nose, burning eye, hallucination and vomiting.” Fifteen people are said to have been injured and ten killed; the review names the ten dead. The

⁹⁶ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

⁹⁷ Josh Rogin, 1718 hrs EDT 22 May 2013, www.thedailybeast.com/articles/2013/05/22/exclusive-u-s-to-bring-chemical-witnesses-out-of-syria.html, via BWPP DF.

⁹⁸ Louis Charbonneau from the UN for Reuters, 1434 hrs EDT 29 May 2013, “UK says informed UN chief of more Syria chemical attacks”, www.reuters.com/article/2013/05/29/us-syria-crisis-un-idUSBRE94S15U20130529, via BWPP DF.

⁹⁹ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

review states that the shelled FSA positions were at Kueres military airport, also referred to as Dier Hafer airport, 16 km outside Aleppo.

[L15] 29 April 2013, Saraqeb: Use by rebels and/or the regime. On 29 April, CNN correspondent Christiane Amanpour is told by a Syrian-American doctor near the Syrian border of Turkey, Zaher Sahloul, that reports from physicians indicated that there had just been another CW attack; he believed this to have been the sixth recent CW attack, but the subsequent CNN blog gives no location or date for any of them. Dr Sahloul is, however, quoted on the medical condition of alleged victims: “We have medical proof. Patients had respiratory and neurological symptoms”. Physicians in Syria had told him that patients were experiencing shortness of breath, respiratory failures, convulsions and going into comas; while some had died, others had survived after taking an antidote for nerve gas. He had also told CNN that physicians working inside Syria were collecting samples – of hair, urine, blood and clothing -- and giving them to his organization, The Syrian American Medical Society, which then conveyed the samples to Turkey, passing them on to the US embassy there.¹⁰⁰

Next day, however, the Syrian ambassador to the United Nations, Bashar al-Jaafari, refers to the claims in March that rebels had fired chemical weapon shells near Aleppo [see record L7 above] and states that “chemical material” had been used in a new incident the previous day: on 29 April, “terrorist groups” in the town of Saraqeb near Idlib had “spread seemingly the contents of plastic bags containing a kind of powder which must be most probably a chemical material”; many people had been affected by this heinous and irresponsible act”, the ambassador also stating that it had been an attempt “to implicate the Syrian government on a false basis”.¹⁰¹

By 1 May, opposition groups were blaming the alleged CW attack on the government.¹⁰²

By 1 May also, a hospital in Reyhanli, Turkey had received 13 Syrian patients with breathing difficulties from Idlib province in northern Syria. To hospital doctors their symptoms reportedly suggested exposure to sarin or mustard gas. Blood samples were taken and sent for analysis to Turkey’s forensic medical institute.¹⁰³ But later it is reported that the samples were negative for sarin and that nothing unusual had been found in them. Additional tests, however, are said to be in progress.¹⁰⁴ Turkish Foreign Minister Ahmet Davutoglu says (in Amman) on 10 May: “We have some indications regarding chemical weapons being used, but

¹⁰⁰ Samuel Burke & Claire Calzonetti, 1711 hrs ET 29 Apr 13, <http://amanpour.blogs.cnn.com/2013/04/29/American-doctor-gives-proof-of-chemical-weapon-use-to-u-s>, via BWPP DF.

¹⁰¹ AFP from the United Nations, 30 April 2013, www.spacewar.com/reports/Syria_holds_out_in_chemical_weapons_inquiry_showdown_999.html, via BWPP DF.

¹⁰² Ece Toksabay from Reyhanli, Turkey, for Reuters, 1820 hrs EDT 1 May 2013, www.reuters.com/article/2013/05/01/us-syria-crisis-chemical-idUSBRE9400SY20130501, via BWPP DF.

¹⁰³ Ece Toksabay from Reyhanli, Turkey, for Reuters, 1820 hrs EDT 1 May 2013, www.reuters.com/article/2013/05/01/us-syria-crisis-chemical-idUSBRE9400SY20130501, via BWPP DF.

¹⁰⁴ Tracey Shelton and Erin Cunningham from Reyhanli, Turkey, 0600 hrs 5 May 2013, www.globalpost.com/dispatch/news/regions/middle-east/syria/130505/syria-chemical-weapons-obama-red-line-turkey-idlib-aleppo-sarin-israel, via BWPP DF.

in order to make sure and verify, we are continuing these tests and will be sharing these tests with UN agencies”.¹⁰⁵

A suspected CW attack in Saraqeb on 29 April is described as follows by the London-based Syrian Network for Human Rights in its May 2013 review of suspected CW incidents, with attribution to “residents’ testimonies”:¹⁰⁶ “Helicopter belonging to Syrian Government’s Air Force (who is owned by only Syrian Government) dropped bags led to dispersion of dust particles, causing 14 suffocation injuries, transferred to Saraqeb hospital.” The review links in several pictures and videos.

On 29 May 2013, Reuters reports that the UK government had, on 24 May, written to UN Secretary-General Ban Ki-moon with particulars of three suspected CW incidents additional to those described in its earlier communications on the same subject, starting in March [see record U1]. One of these, according to an unidentified “Western diplomat” quoted by Reuters, was a 29 April incident in Saraqeb.¹⁰⁷

On 4 June 2013, French Foreign Minister Laurent Fabius announces that his government has found sarin in samples from Syria it has been analysing [see record U8 below].¹⁰⁸ He does not at the time specify the origin of the samples, but it is later reported that one comprised blood sampled after an aircraft attack at Saraqeb on 29 April in which the sarin metabolite IMPA had been found at a level of 9.5 ng/ml.¹⁰⁹

[L16] 4 May 2013, Qusayr: Use by Hezbollah. On 4 May 2013, Free Syrian Army spokesperson Louay Almkdad tells *Al Arabiya* that residents of Qusayr had said that Hezbollah – the Lebanon-based Shia Muslim militant group and political party – is using mustard-gas artillery shell in the area. *Al Arabiya* says that activists had reported that Hezbollah, along with forces loyal to the Syrian president, had been using chemical weapons against the armed opposition.¹¹⁰

[L17] Early May 2013, unlocated: Use by regime. Rebel spokesperson Louay al Mokdad [see record L16 above] says opposition fighters have captured an unexploded canister from an alleged CW attack “last week”, so reports CNN on 10 May, not identifying either the location or the date of the incident. CNN says that Mokdad “hoped international experts would use the canister as evidence of alleged Syrian government war crimes”.¹¹¹

¹⁰⁵ Suleiman Al-Khalidi from Amman, 11 May 2013, www.washingtonpost.com/world/wounded-syrians-show-signs-of-chemical-attack-turkey-says/2013/05/10/e6sf5e52-b9ad-11e2-aa9e-a02b765ff0ea_story.html, via BWPP DF.

¹⁰⁶ “Syrian Network for Human Rights confirms using chemical weapons by Assad regime” as webposted by the London-based Global Arab Network at www.english.globalarabnetwork.com/2013052013000/Syria-Politics/syrian-network-for-human-rights-confirms-using-chemical-weapons-by-assad-regime.html.

¹⁰⁷ Louis Charbonneau from the UN for Reuters, 1434 hrs EDT 29 May 2013, “UK says informed UN chief of more Syria chemical attacks”, www.reuters.com/article/2013/05/29/us-syria-crisis-un-idUSBRE94S15U20130529, via BWPP DF.

¹⁰⁸ “Syrie – Armes chimiques – Déclaration de Laurent Fabius (4 Juin 2013)”, www.diplomatie.gouv.fr/fr/dossiers-pays/syrie/la-france-et-la-syrie/evenements-4439/article/syrie-armes-chimiques-declaration, via BWPP DF.

¹⁰⁹ Hélène Sallon, *Le Monde* online, 1832 hrs 5 June 2013, “Armes chimiques en Syrie: ‘Des preuves indiscutables et irréfutables’”, www.lemonde.fr/proche-orient/article/2013/06/05/armes-chimiques-en-syrie-des-preuves-indiscutables-et-irrefutables_3424661_3218.html; and Ian Sample and Julian Borger, “Syria crisis: UK and France claim attack victims test positive for sarin”, 0805 hrs BST 5 June 2013, <http://m.guardian.co.uk/world/2013/jun/04/syria-nerve-agent-sarin...>

¹¹⁰ *Al Arabiya*, 2132 hrs GMT 4 May 2013, <http://english.alarabiya.net/en/News/middle-east/2013/05/04/FSA-accuses-Hezbollah-of-using-chemical-weapons-in-Qusayr-.html>, via BWPP DF.

¹¹¹ Ivan Watson and Gul Tuysuz for CNN, 0948 hrs GMT 10 May 2013, “Source: Patients from Syria being tested for chemical weapons”, <http://edition.cnn.com/2013/05/10/world/meast/Syria-turkey-chemical-weapons/>.

[L18] 14 May 2013, Qasr Abu Samrah: Use by regime. On 13 June 2013 the US Deputy National Security Advisor for Strategic Communications, Ben Rhodes, announces that the US intelligence community has now arrived at a new and “high-confidence assessment” of the use of chemical weapons in Syria [see record U9 below]. He speaks of four incidents in particular that “we associate with this assessment”. Three of these had already been the subject of public allegation: seemingly those described in records L7 and L11 above and L19 below. The new one is identified, without any further detail, as “a May 14th attack, also this year, in the town of Qasr Abu Samra, which is north of Homs”.¹¹² In a letter to the UN Secretary-General next day, the US Permanent Representative to the UN, Ambassador Susan Rice, reportedly states that “unspecified chemicals, possibly including chemical warfare agents” had been used in the attack; for two other incidents she had, in contrast, written expressly of sarin nerve-gas having been used.¹¹³

[L19] Adra, 23 May 2013: Use by the regime. The Paris *Le Monde* on 27 May 2013 reports that, according to rebels, a “new chemical attack” had taken place in Adra on 23 May.¹¹⁴ AP delays reporting the alleged attack until the following month, citing the difficulty of verifying the claims; in some cases, it said, “there is no way to reconcile the opposing narratives”. There were activists, AP wrote, who “alleged that on May 24 troops fired two rockets with poisonous gas at the rebel-held town of Adra ..., killing three people and wounding more than 40. Amateur video from a makeshift clinic in the nearby town of Douma that was treating some of the victims showed young men lying on the floor, some of them twitching slightly as medics poured water on their bodies. ... A doctor at the Douma clinic ... said 60 victims arrived that day and that six of them died. ‘It was the scariest thing I saw, people came in with strange symptoms liked blurred vision, dilated [*sic*] pupils, teary eyes. Some had running saliva or were foaming at the mouth’. [Rebel brigade commander Abu Khaled al-Ijweh] witnessed the attack. He said regime forces fired two suspicious projectiles. Fighters started to throw up, some struggled to walk and dropped to the ground, he said. Al-Ijweh said he managed the symptoms by wearing a mask, drinking vinegar and a liter of water.”¹¹⁵

On 13 June 2013 the US Deputy National Security Advisor for Strategic Communications, Ben Rhodes, identifies “a May 23rd attack in the eastern part of Damascus, in Adra” as one of four incidents associated with the new “high-confidence assessment” of the US intelligence community that Syria has been using chemical weapons [see record U9 below].¹¹⁶ The US letter to the UN Secretary-General next day reportedly states, not that sarin

¹¹² The White House, Office of the Press Secretary, 1716-1748 hrs EDT 13 June 2013, “On-the-Record Conference Call by Deputy National Security Advisor for Strategic Communications Ben Rhodes on Syria”, www.whitehouse.gov/the-press-office/2013/06/13/record-conference-call-deputy-national-security-advisor/strategic-commun.

¹¹³ Edith M Lederer for The Associated Press, 14 June 2013, “US letter: Syrian regime used chemical weapons agent sarin twice in Aleppo”, <http://ca.news.yahoo.com/un-chief-opposes-us-arms-syria-rebels-says-164659094.html> via BWPP DF.

¹¹⁴ Jean-Philippe Rémy (from Jobar, Damascus), *Le Monde* (Paris), 0558 hrs 27 May 2013, English translation by Meg Bortin webposted at www.lemonde.fr/proche-orient/article/2013/05/27/chemical-war-in-syria_3417708_3218.html, via BWPP DF.

¹¹⁵ AP from Paris, 4 June 2013, www.artesiannews.com/2013/06/04/ap-news/international-ap-news/un-more-evidence-needed-on-syria-chemical-weapons/, via BWPP DF.

¹¹⁶ The White House, Office of the Press Secretary, 1716-1748 hrs EDT 13 June 2013, “On-the-Record Conference Call by Deputy National Security Advisor for Strategic Communications Ben Rhodes on Syria”, www.whitehouse.gov/the-press-office/2013/06/13/record-conference-call-deputy-national-security-advisor/strategic-commun.

had been used in the attack as in the two Aleppo incidents, but instead “unspecified chemicals, possibly including chemical warfare agents”.¹¹⁷

Here, finally, are records of the allegations *cum* accusations of chemical-weapons employment that have been directed publicly against Syria by spokespersons of government in Britain, France, Israel, Turkey and the United States. Again the order is chronological.

[U1] 25 March 2013: Britain and France. More than three weeks elapse before this first set of governmental allegations enters the public domain. On 18 April 2013, the *Washington Post* reports unidentified senior diplomats saying that the governments of both France and the UK had informed the United Nations that there existed credible evidence that, in Syria, chemical weapons had been used by government forces on more than one occasion since December. Their (unpublished) letters to UN Secretary-General Ban Ki-moon had said, the newspaper continues, that “soil samples, witness interviews and opposition sources support charges that nerve agents were used in and around the cities of Aleppo, Homs, and possibly Damascus”.¹¹⁸ The *New York Times* reports that the correspondence, of which it said it had copies, had begun on 25 March and that it referred to three attack-sites: Aleppo and the suburbs of Damascus on 19 March, and an earlier episode in Homs in December.¹¹⁹ A subsequent *New York Times* report quotes the UK letter as having said there were reports of 15 deaths in the suburban Damascus attack and upto 10 in Aleppo;¹²⁰ other reporting locates these alleged attacks on 19 March more precisely to Khan al-Assal (Aleppo) and Ataybah (Damascus),¹²¹ though the London *Observer* subsequently states that the UK letter had dated only the Aleppo attack to 19 March, the Damascus one being dated to 23 March.¹²²

[U2] 18 April 2013: United States. The Director of US National Intelligence, James R Clapper Jr, testifies as follows before the Senate Armed Services Committee on 18 April 2013: “We receive many claims of chemical warfare use in Syria each day and we take them all seriously and do all we can to investigate them”. The *New York Times* reports that this testimony “reflected growing assessment within the American intelligence community that the Syrian government may have used some kind of chemical agents, such as a powerful tear gas, but not the most deadly ones, such as sarin. These assessments are based on witness accounts, medical results from Syrian civilians who may have been exposed to chemical

¹¹⁷ Edith M Lederer for The Associated Press, 14 June 2013, “US letter: Syrian regime used chemical weapons agent sarin twice in Aleppo”, <http://ca.news.yahoo.com/un-chief-opposes-us-arms-syria-rebels-says-164659094.html> via BWPP DF.

¹¹⁸ Colum Lynch and Karen DeYoung from the United Nations, www.washingtonpost.com/world/national-security/britain-france-claim-syria-used-chemical-weapons/2013/04/18/f17a2e7c-a82f-11e2-a8e2-5b98cb59187f_story.html..., 18 April 2013, via BWPP DF.

¹¹⁹ Rick Gladstone and Eric Schmitt, “Kuwait gives Syria aid”, 18 April 2013, www.nytimes.com/2013/04/19/world/middleeast/Syria.html... and Mark Landler from Washington, 24 April 2013, www.nytimes.com/2013/04/25..., both via BWPP DF..

¹²⁰ Mark Landler and Eric Schmitt, 25 Apr 13, www.nytimes.com/2013/04/26/world/middleeast/us-says-it-suspects-assad-used-chemical-weapons.html..., via BWPP DF.

¹²¹ *Times of Israel*, 0636 hrs 13 April 2013, www.timesofisrael.com/soil-sample-proves-chemical-weapons-used-in-syria/, via BWPP DF.

¹²² Peter Beaumont, “Syria nerve gas claims undermined by eyewitness accounts”, 2301 hrs BST 27 April 2013, *The Observer* (London) as at www.guardian.co.uk/world/2013/apr/28/syrian-nerve-gas-claims-eyewitness, via BWPP DF.

agents who were treated in Turkey, and preliminary testing of soil samples taken from Syria. But officials say there is no consensus and that more testing is needed.”¹²³

[U3] 23 April 2013: Israel. During a conference at the Institute for National Security Studies in Tel Aviv on 23 April 2013, a senior Israeli military intelligence official – Brigadier Itai Brun, commander of the research division of the IDF Intelligence Directorate -- says: “To the best of our professional understanding, the regime used lethal chemical weapons against the militants in a series of incidents over the past months, including the relatively famous incident of March 19. ... Shrunken pupils, foaming at the mouth and other signs indicate, in our view, that lethal chemical weapons were used”. These words are from an Associated Press account. *Haaretz* reports Brigadier Brun as saying that the Israeli evidence included “photographs taken of the area after the attacks”, and that the photographs indicated sarin gas as well as a second agent – “a retardant of some kind”.¹²⁴ An INSS publication about Brigadier Brun’s presentation has him saying that “Israel has information indicating that Assad’s forces used a lethal chemical weapon several times against the rebels, likely sarin, along with incapacitating chemical agents”.¹²⁵ The *Washington Post* reports an unidentified “second senior Israeli military officer” as telling reporters that “sarin-type” chemical weapons appear to have been used in five cases, killing “dozens” of people.¹²⁶

[U4] 25 April 2013: United States (# 2). The Legislative Director of the Obama White House, Miguel Rodriguez, writes as follows in letters sent on 25 April 2013 to two prominent US senators [John McCain and Carl Levin]: “Our intelligence community does assess, with varying degrees of confidence, that the Syrian regime has used chemical weapons on a small scale in Syria, specifically, the chemical agent sarin”. He writes, further, that the United States was still seeking “credible and corroborated facts” before deciding how to proceed. According to the White House in concurrent press reporting, the US intelligence assessments are based in part on “physiological samples”, while unidentified officials are reported by the *New York Times* this same day as saying the basis was “the testing of soil samples and blood drawn from people who had been wounded”. An unidentified source quoted by McClatchy Newspapers also on 25 April reported that a trace of nerve-agent “byproduct” had been found in a soil sample but cautioned that “there are also fertilizers that give out the same byproduct”.¹²⁷ The locations of the apparent sarin use are not disclosed in the White House letters, but *Huffington Post* today reports this: “A US official [unidentified] said intelligence agencies have had indications of chemical weapons use since March and reached the conclusions made public [today] about two weeks ago. The ... incidents are believed to have occurred around 19 March in ... Aleppo and suburbs of Damascus, the official said.”¹²⁸ Further detail, attributed to an unidentified

¹²³Rick Gladstone and Eric Schmitt, “Kuwait gives Syria aid”, 18 April 2013, www.nytimes.com/2013/04/19/world/middleeast/Syria.html..., via BWPP DF. 2013

¹²⁴ Ariel Zirulnick, *Christian Science Monitor*, 23 April 2013, as posted on <http://news.yahoo.com/israel-charges-syria-lethal-chemical-weapons-124157577.html>, via BWPP. See also Jodi Rudoren and David E Sanger from Tel Aviv, 23 April 2013, www.nytimes.com/2013/04/24/world/middleeast/israel-says-syria-has-used-chemical-weapons.html..., via BWPP DF.

¹²⁵ David Friedman, “Chemical weapons in Syria: has a red line been crossed?”, *INSS Insight* no 421, 29 April 2013

¹²⁶ Anne Gearan and William Booth, 0024 hrs 24 Apr 13, www.washingtonpost.com/world/national-security/us-still-evaluating-claims-that-syrian-government-used-chemical-weapons/2013/04/23/..., via BWPP DF.

¹²⁷ Jonathan S Landay, Matthew Schofield and Anita Kumar for McClatchy Newspapers, 25 April 2013, as in www.charlotteobserver.com/2013/04/25/4003424/syria-used-chemical-weapons-white.html, via BWPP DF.

¹²⁸ Mark Landler and Eric Schmitt, 25 Apr 13, www.nytimes.com/2013/04/26/world/middleeast/us-says-it-suspects-assad-used-chemical-weapons.html...; Julie Pace and Bradley Klapper from Washington, 1814 hrs ET 25 April 2013, www.huffingtonpost.com/2013/04/25/syria-chemical-weapons-chuck-hagel_n_3155389.html both via BWPP DF.

“American intelligence source”, soon appears on *Wired*. Several blood samples, supposedly taken by Syrian opposition groups from multiple victims of the alleged CW attack in Aleppo during March, had tested positive for the nerve agent sarin; and, according to the London *Financial Times* as reported by *Wired*, the blood samples had been examined by the UK laboratory at Porton Down as well as by American analysts. *Wired* notes, however, that American analysts were not entirely sure where the blood had come from nor when precisely the exposure had taken place: the chain of custody had, in other words, not been fully established.¹²⁹ The American positive tests for sarin are “understood” by the London *Daily Telegraph* to have been conducted on samples not only of blood but also of hair; the newspaper, which again cites no sources for this information, seems to be saying the UK tests at Porton had been done only on samples of soil, not blood as well.¹³⁰ An unidentified US defence official is reported in the *Los Angeles Times* as saying one of the samples studied by the United States had been collected in December, this date rather suggesting it had come from Homs.¹³¹

[U5] 25 April 2013: Britain (# 2). Following the US government’s disclosure of its new intelligence assessment [see record U4 above], the UK Foreign Office announces on 25 April 2013 that Britain has “limited but persuasive evidence from various sources showing chemical weapon use in Syria including sarin”.¹³² There had been previous press reporting that a soil sample brought back from a neighbourhood on the outskirts of Damascus had shown traces of “some kind of chemical weapon” during examination by Porton Down scientists.¹³³ Visiting London at about this time, the leader of the UN Secretary-General’s Syrian CW investigation team, Åke Sellström, reportedly examines the British evidence. He is expected to travel to other capitals as well in order to be shown other intelligence and to interview Syrian refugees.¹³⁴ On 2 May, UK Defence Secretary Philip Hammond says that Britain had shared its intelligence directly with all the other members of the UN Security Council.¹³⁵

[U6] 9 May 2013: Turkey. Prime Minister Recep Tayyip Erdogan says: “It is clear the regime has used chemical weapons. There are patients who are brought to our hospitals who were wounded by these chemical weapons.” He was speaking during an interview broadcast by NBC News on 9 May.¹³⁶ Later an unidentified “senior Turkish official” is reported, on 5 June, as

¹²⁹ Noah Shachtman and Spencer Ackerman with Greg Miller, 1311 hrs 25 Apr 13, updated 1658 hrs 26 Apr 13, “Syrian blood tests positive for sarin gas, US spies say”, www.wired.com/dangerroom/2013/04/sarin-tainted-blood/, via BWPP DF.

¹³⁰ James Kirkup and Richard Spencer, 1724 hrs 28 April 2013, www.telegraph.co.uk/news/worldnews/middleeast/syria/10024199/Syria-chemical-weapons-MPs-demand-evidence-of-sarin-use-by-Assad.html, via BWPP DF.

¹³¹ Peter Beaumont, “Syria nerve gas claims undermined by eyewitness accounts”, 2301 hrs BST 27 April 2013, *The Observer* (London) as at www.guardian.co.uk/world/2013/apr/28/syrian-nerve-gas-claims-eyewitness, via BWPP DF.

¹³² BBC News, “‘Growing evidence’ of chemical weapons use in Syria – UK”, 1419 hrs GMT 26 April 2013, www.bbc.co.uk/news/world-middle-east-22305444, via BWPP DF; AFP, 26 Apr 13, as posted on www.google.com/hostednews/afp/article..., via BWPP DF;

¹³³ London *Times*, 13 April 2013, as reported by *Times of Israel*, 0636 hrs 13 April 2013, www.timesofisrael.com/soil-sample-proves-chemical-weapons-used-in-syria/, via BWPP DF.

¹³⁴ Colum Lynch from the United Nations, 1 May 2013, www.washingtonpost.com/world/national-security/un-faces-ghost-of-iraq-in-evaluating-chemical-weapons-use-in-syria-2013/05/01/, via BWPP DF.

¹³⁵ Dan Roberts from Washington, 1712 Hrs BST 2 May 2013, www.guardian.co.uk/world/2013/may/02/us-uk-syria-chemical-weapons-claims, via BWPP DF.

¹³⁶ Ivan Watson and Gul Tuysuz for CNN, 0948 hrs GMT 10 May 2013, “Source: Patients from Syria being tested for chemical weapons”, <http://edition.cnn.com/2013/05/10/world/meast/Syria-turkey-chemical-weapons/>.

having said that his country had collected its own samples from victims of chemical attacks in Syria and had concluded that the regime had used sarin in small quantities.¹³⁷

[U7] 20 May 2013: Britain (# 3). UK Foreign Secretary William Hague makes the following statement to the House of Commons: “There is a growing body of limited but persuasive information showing that the regime used—and continues to use—chemical weapons. We have physiological samples from inside Syria that have shown the use of sarin, although they do not indicate the scale of that use. Our assessment is that the use of chemical weapons in Syria is very likely to have been by the regime. We have no evidence to date of opposition use. We welcome the UN investigation, which in our view must cover all credible allegations and have access to all relevant sites in Syria. We continue to assist the investigation team and to work with our allies to get more and better information about these allegations.”¹³⁸

[U8] 4 June 2013: France (# 2). Foreign Minister Laurent Fabius meets with the team-leader of the UN Secretary-General’s investigation of the Syria CW-use reports, Åke Sellström, on 4 June 2013 to convey the findings of his government’s laboratory analyses of samples from Syria, and he later issues a statement that includes the following: “These analyses demonstrate the presence of sarin in the samples in our possession. Given these elements, France now has certainty that in Syria sarin gas has been used several times and in a localized manner. ... It would be unacceptable for the perpetrators of these crimes to benefit from impunity.”¹³⁹

The statement itself gives no indication of what the samples were or where they had come from, but Fabius later tells France 2 television that they included blood samples from victims of an April attack in Idlib province and that “we are aware of the entire chain [of custody], from when the attack took place to when the people were killed and the samples taken”; and he also says on television there was “no doubt” that, at least in that one case, the regime and its allies were responsible for the attack.¹⁴⁰ Reportedly, Fabius also says that a second set of samples -- urine samples carried out of Syria by French journalists -- “prove the presence of sarin”.¹⁴¹ The French television channel Europe 1 reports that samples analysed by the government showed that sarin had been used “in a sophisticated cocktail of chemicals”.¹⁴²

UN Secretary-General Ban Ki-moon issues a statement on 5 June that contains the following: “Yesterday in Paris Mr Sellström received additional information related to the reports of the alleged use of chemical weapons in Syria submitted by the Government of France. Mr Sellström cautions that the validity of the information is not ensured in the absence of

¹³⁷ Ian Sample and Julian Borger, “Syria crisis: UK and France claim attack victims test positive for sarin”, 0805 hrs BST 5 June 2013, <http://m.guardian.co.uk/world/2013/jun/04/syria-nerve-agent-sarin...>

¹³⁸ *Hansard (Commons)* 20 May 2013, columns 903-6, Statement on Syria by the Secretary of State for Foreign and Commonwealth Affairs (Mr William Hague).

¹³⁹ “Syrie – Armes chimiques – Déclaration de Laurent Fabius (4 Juin 2013)”, www.diplomatie.gouv.fr/fr/dossiers-pays/syrie/la-france-et-la-syrie/evenements-4439/article/syrie-armes-chimiques-declaration, via BWPP DF.

¹⁴⁰ Steven Erlanger and Nick Cumming-Bruce (from Paris), 4 June 2013, www.nytimes.com/2013/06/05/world/middleeast/france-offers-evidence-of-multiple-uses-of-nerve-gas-in-syria/html, via BWPP DF; AP from Paris, 4 June 2013, www.artesianews.com/2013/06/04/ap-news/international-ap-news/un-more-evidence-needed-on-syria-chemical-weapons/, via BWPP DF; and Ian Sample and Julian Borger, “Syria crisis: UK and France claim attack victims test positive for sarin”, 0805 hrs BST 5 June 2013, <http://m.guardian.co.uk/world/2013/jun/04/syria-nerve-agent-sarin...>

¹⁴¹ Steven Erlanger and Nick Cumming-Bruce (from Paris), 4 June 2013, www.nytimes.com/2013/06/05/world/middleeast/france-offers-evidence-of-multiple-uses-of-nerve-gas-in-syria/html, via BWPP DF.

¹⁴² Ian Sample and Julian Borger, “Syria crisis: UK and France claim attack victims test positive for sarin”, 0805 hrs BST 5 June 2013, <http://m.guardian.co.uk/world/2013/jun/04/syria-nerve-agent-sarin...>

convincing evidence of the chain-of-custody of the data collected. In this regard, he reiterates his belief that on-site activities are essential if the United Nations is to be able to establish the facts.”¹⁴³

[U9] 13 June 2013: The United States (# 3). After a period during which US-French discord over Syrian chemical weapons and the newly disclosed French evidence [see record U8 above] was being reported,¹⁴⁴ Deputy National Security Adviser Benjamin Rhodes issues a statement on 13 June 2013 that outlines a new and updated version of the US assessment of the suspected use of chemical weapons within Syria [see record U4 above].¹⁴⁵ The statement includes the following:

“Following a deliberative review, our intelligence community assesses that the Assad regime has used chemical weapons, including the nerve agent sarin, on a small scale against the opposition multiple times in the last year. Our intelligence community has high confidence in that assessment given multiple, independent streams of information. The intelligence community estimates that 100 to 150 people have died from detected chemical weapons attacks in Syria to date; however, casualty data is likely incomplete. While the lethality of these attacks make up only a small portion of the catastrophic loss of life in Syria, which now stands at more than 90,000 deaths, the use of chemical weapons violates international norms and crosses clear red lines that have existed within the international community for decades. We believe that the Assad regime maintains control of these weapons. We have no reliable, corroborated reporting to indicate that the opposition in Syria has acquired or used chemical weapons.

“The body of information used to make this intelligence assessment includes reporting regarding Syrian officials planning and executing regime chemical weapons attacks; reporting that includes descriptions of the time, location, and means of attack; and descriptions of physiological symptoms that are consistent with exposure to a chemical weapons agent. Some open source reports from social media outlets from Syrian opposition groups and other media sources are consistent with the information we have obtained regarding chemical weapons use and exposure. The assessment is further supported by laboratory analysis of physiological samples obtained from a number of individuals, which revealed exposure to sarin. Each positive result indicates that an individual was exposed to sarin, but it does not tell us how or where the individuals were exposed or who was responsible for the dissemination.

“We are working with allies to present a credible, evidentiary case to share with the international community and the public. Since the creation of the UN fact finding mission, we have provided two briefings to Dr. Åke Sellström, the head of the mission. We will also be providing a letter to UN Secretary General Ban, calling the UN’s attention to our updated intelligence assessment and specific incidents of alleged chemical weapons use. We request

¹⁴³ Secretary-General Ban Ki-moon, “Note in response to questions on the alleged use of chemical weapons in Syria”, New York, 5 June 2013, www.un.org/sg/offthecuff/index.asp?nid=2862.

¹⁴⁴ See, for example, *Al Arabiya*, “France, US at odds over Syria’s chemical weapons, says diplomat”, 6 June 2013, <http://english.alarabiya.net/en/News/world/2013/06/06/France-U-S-at-odds-over-Syria-s-chemical-weapons-says-diplomat.html>, via BWPP DF.

¹⁴⁵ “Text of White House Statement on Chemical Weapons in Syria”, *New York Times*, 13 June 2013, www.nytimes.com/2013/06/14/us/politics/text-of-white-house-statement-on-chemical-weapons-in-syria.html, via BWPP DF.

that the UN mission include these incidents in its ongoing investigation and report, as appropriate, on its findings. We will present additional information and continue to update Dr. Sellström as new developments emerge.”

During a subsequent on-the-record conference call, Ben Rhodes gave examples of “incidents that we associate with this assessment”. They included: “a March 19th attack of this year in which we assessed that sarin was used in the Aleppo suburb of Khan al-Assal; an April 13th attack that was also in the Aleppo area in the neighbourhood of Sheikh Maqsood; a May 14th attack, also this year, in the town of Qasr Abu Samra, which is north of Homs; a May 23rd attack in the eastern part of Damascus, in Adra.”¹⁴⁶

On the following day, the US Permanent Representative to the UN, Ambassador Susan Rice, tells reporters that the letter to the UN Secretary-General had been delivered that morning. She says that the letter “outlined additional information that we think could contribute to that understanding of what has in fact transpired if the team were granted the access that we think it deserves”.¹⁴⁷

[U10] 14 June 2013: Britain (# 4). Prime Minister David Cameron tells reporters that Britain shares the Americans’ “candid assessment” [see record U9 above] and makes this statement: “There is credible evidence of multiple attacks using chemical weapons in Syria, including the use of the abhorrent agent sarin. We have tested physiological samples at Porton Down. These include samples from [incidents] at Utaybah on 19 March and at Sheikh Maqsood on 13 April. We believe the scale of the use is sanctioned and ordered by the Assad regime. We have not seen any credible reporting of chemical weapons use by the Syrian opposition. However, we assess that elements affiliated to al-Qaida in the region have attempted to acquire chemical weapons for possible use in Syria. That is the picture described to me by the Joint Intelligence Committee and I always choose my words on this subject very carefully because of the issues that there have been in the past.”¹⁴⁸

On 5 June, the UK ambassador to the UN, Mark Lyall Grant (who is this month’s president of the Security Council) had said on British television “I don’t think there’s anyone who really doubts what we have been saying about the use of chemical weapons in Syria and use by the regime. ... The evidence that we have suggests that there is a use of a number of different variants of chemical agents, a combination of agents in some cases, sometimes including sarin, sometimes not. It is relatively small quantities but nonetheless repeated use and any use of chemical weapons is abhorrent.”¹⁴⁹

¹⁴⁶ The White House, Office of the Press Secretary, 1716-1748 hrs EDT 13 June 2013, “On-the-Record Conference Call by Deputy National Security Advisor for Strategic Communications Ben Rhodes on Syria”, www.whitehouse.gov/the-press-office/2013/06/13/record-conference-call-deputy-national-security-advisor/strategic-commun.

¹⁴⁷ United States Mission to the United Nations, “Remarks by Ambassador Susan E Rice ... at a Security Council Stakeout on Syria, 14 June 2013, <http://usun.state.gov/briefing/statements/210674.htm>.

¹⁴⁸ Patrick Wintour, Miriam Elder (in Moscow) and Richard Norton-Taylor, “Syrian regime used sarin against opposition at least twice, says Cameron”, 1809 hrs BST 14 Jun13, <http://m.guardian.co.uk/world/2013/jun/14/syria-sarin-rebels-twice-cameron>, includes video of Cameron reading his statement.

¹⁴⁹ Channel 4 News, 5 June 2013, “Syria chemical weapons: has Obama’s ‘red line’ been crossed?”, www.channel4.com/news/syria-war-chemical-weapons-barack-obama-united-nations, via BWPP DF; “UN reserves judgement on Syrian sarin use, 6 June 2013, www.nti.org/gsn/article/un-not-swayed-frances-evidence-syrian-sarin-use/?mgh=http%3A%2F%2Fwww.nti.org&mfg=1, via BWPP DF.

On 29 May, Lyall had been reported by Reuters as having written to UN Secretary-General Ban Ki-moon about suspected CW attacks by Syrian government forces during March and April additional to those he had specified in March correspondence [see record U1 above]. An unidentified UN official is quoted as saying that Lyall's latest letter identified three specific incidents, all of which had previously received unofficial publicity. And Reuters quotes an unidentified Western diplomat as locating the three incidents to Adra (on 24 March), Daraya (25 April) and Saraqeb (29 April).¹⁵⁰

Part 3: Conclusion

The picture we currently have of chemical-weapons employment in Syria originates in descriptions by local civil society and by journalists. The descriptions since 2012 that are known to HSP have been summarized in records L2 through L19 above. In summary, those records refer to 20, perhaps 30, episodes of chemical warfare during the past eighteen months in which a total of more than 95 people apparently died from poison and at least 700 more were affected by it.

Thus far in the Syrian civil war, at least 93,000 people have died, hundreds of thousands more have been injured, and a still greater number forced to flee. Reports of deliberately small-scale acts of poisoning, for that is what the allegations appear to be, seem trivial against such a background. Yet, if there is indeed purposeful poison-gas warfare going on in Syria within populated civilian areas, it is the first time the world has witnessed any such thing since its repeated occurrence during 1987-88 in Kurdish areas of Iran and Iraq. The individuals primarily responsible for that quarter-century old crime were never expressly held to account for it.¹⁵¹ Failure to act against the perpetrators of the same type of crime in Syria, if the reports are true, could be tantamount to condoning it, even legitimizing such chemical warfare for the future. That would not be trivial, for poison gas is a potential weapon of mass destruction, whatever the Syria allegations may display to the contrary.

The truth of the matter is nowhere near established yet. The present paper has shown that the reporting leaves far too many questions unanswered, and the possible dependence of at least some of the reporting on misunderstanding or on planted evidence cannot be excluded. Still, overlaying the civil-society and other nongovernmental reporting of chemical warfare, there is now the body of accusation (set out in records U1 through U10 above) that certain Western governments have made against the Syrian regime, notwithstanding sustained repudiation by Russia, Iran and China. Of course in some quarters the mere fact of such accusations having been made is enough to promote belief in the allegations underpinning them. Would the British or the US government, for example, ever embark upon such a hostile act without the full backing of incontrovertible evidence? True, the wider ramifications of the Syrian civil war, plus the necessity of protecting intelligence methods and sources, may have inhibited candour by the accusing governments, and this could be why there is such a striking

¹⁵⁰ Louis Charbonneau from the UN for Reuters, 1434 hrs EDT 29 May 2013, "UK says informed UN chief of more Syria chemical attacks", www.reuters.com/article/2013/05/29/us-syria-crisis-un-idUSBRE94S15U20130529, via BWPP DF.

¹⁵¹ Though some were convicted on other charges, notably Ali Hassan al-Majid, *aka* 'Chemical Ali', who received death sentences for genocide, crimes against humanity (specifically wilful killing, forced disappearances and extermination) and war crimes (intentionally directing attacks against a civilian population). The war crimes of employing poison or poisoned weapons or of employing prohibited gases, liquids, materials or devices were not among the charges.

dearth of detail in their allegations. Even so, the pressing task of demonstrating whether there is or is not truth in the allegations necessitates more evidence than bald assertion. It is not at all obvious why, at the very least, the British, French, Turkish and US governments have not publicly described for scientific audiences the analytical methods they applied to the physiological (and perhaps other) samples in which they all say they have found sarin. Possibly political authorities in the accusing countries have been unable accurately to judge the reliability of chemical analytical reports.

Comparison of the L-series and U-series records points to other disclosures that the accusing governments could surely make without great cost to their interests. Not findings from their more clandestine intelligence methods such as communication intercepts, but perhaps more overview of, for example, the accounts obtained from eye witnesses, first-aid givers, and physicians caring for apparently poisoned patients. The governmental disclosures remain conspicuously reticent, moreover, on topics such as agent dissemination and delivery means. The French, British and US allegations do already display a pattern of increasing disclosure. Those of one government seem sometimes to have stimulated those of another. Admirable also has been the stimulatory effect of civil-society reporting upon governmental transparency. The prime example has been the publication by the Paris *Le Monde* during 27 May and 5 June of its two-month under-cover investigation in Damascus, including the samples-for-findings deal that the newspaper struck with the French defence ministry. One may ask whether, without that courageous investigative reporting, the US government would have disclosed its new Syria-CW intelligence estimate so soon, or the British its current JIC assessment. And we in civil society at large are better able, thanks to *Le Monde*, to judge the credibility of the allegations, if not yet their reliability. For the latter we have to remain largely dependent on what government chooses to tell us.

So let us, in conclusion, leave aside the question of reliability, recognising that the truth is not yet available, and focus instead on the question of credibility. The most striking feature of the L2-L19 records is surely the small scale on which the chemical weapons are described as having been used. Nor is this something we learn only from the eye-witness and other on-the-spot reporting; contextual record C10 relates how one seemingly knowledgeable defector described the Syrian CW-use doctrine newly prevailing in December 2012 and how it was actually being implemented: “The intention was to incapacitate rebels and force them out of strategic areas, while keeping deaths among their ranks limited”. Here, one may think, is a credible explanation for a manifestation of chemical warfare that, in its recurrence of limited agent releases evidently aimed at disabling, not necessarily killing, enemy combatants, is quite different from the mass-killing wide-area-effect narratives that dominate the history of poison-gas warfare. The initial explanation – that Syria has merely been probing the resolve of outside powers who might intervene if the scale or intensity of the chemical warfare became too great – is just not plausible, nor is it sufficient to explain the apparently repetitive and not increasingly escalatory character of successive CW incidents alleged. The existence of the better explanation makes it that much easier to believe the allegations. Their credibility is increased.

Proceeding further down this track of speculation, one encounters both substantiation and weighty practical implication. As to the first, is not this putative Syrian mode of chemical warfare close to embodying what Fritz Haber, the pioneer of modern chemical weapons, taught

in 1924 was the unique attribute of poison gas, its effect on the “psychic equilibrium” of exposed combatants?¹⁵² Thus, not only was the demoralizing effect of gas likely to be far greater than that of any other means of combat, but it was also of greater importance than the ability of gas to produce casualties . This view persisted in German CW doctrine right into the age of nerve gas,¹⁵³ though it seems not to have entered the chemical-weapons employment doctrines characteristic of the East-West confrontation in Europe during the Cold War. Those were the doctrines that saw poison gas, if antichemical protection were absent, as a likely weapon of mass destruction.

The present paper is not the place to explore the notion in depth or to track it through the CW cultures of different countries. Both need doing, however, for the Syrian mode carries the implication that some of the concepts underlying both the Chemical Weapons Convention and the routine work of its implementing agency, the OPCW, may actually be wrong. Above all there is the concept of “militarily significant quantity” of a chemical warfare agent. The original negotiators of the CWC struggled to put numbers to that quantity, and eventually did so through devices such as the “billion dose rule” that in effect defined the casualty-producing power of a given quantity of chemical agent. Such numbers then became the basis for specifying the various quantitative possession, declaration and reporting thresholds that now partly direct the functioning of the treaty. But if the significance were somehow to be assessed in terms of demoralizing ability rather than casualty production, the numbers could well be much smaller. The Syrian mode would therefore no longer allow us to assume that the CWC thresholds remain fit for purpose. At some point in the future, the OPCW may think it worth exploring this problem. For the present, of course, the Organization has more pressing tasks, especially with the Syrian situation bringing home so clearly the immediate practical value of the OPCW’s objectivity, standard-setting, resources and competence.

¹⁵² F Haber, *Fünf Vorträge* (Berlin, 1924).

¹⁵³ See SIPRI, *The Problem of Chemical and Biological Warfare*, volume I (Stockholm and New York, 1971) p 300 and also pp 154 and 296.

Appendix 1: Obtaining High Confidence in Chemical Analyses of Suspected CW Samples

Obtaining reliable chemical analyses is not nearly as simple as non-specialists might think. This may be seen in the fact that even highly regarded national laboratories participating in the Official Proficiency Tests overseen by the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons (OPCW) have, on occasion, reported false positives and false negatives.

What would be required in order to have high confidence in laboratory evidence for the presence of sarin or other chemical warfare agents or their distinctive breakdown products in environmental or biomedical samples? Much of the following outline draws from historical experience, including the investigation of the so-called Yellow Rain in southeast Asia that commenced in 1978. It follows practices developed over the years by the OPCW Technical Secretariat.

- **Chain of custody.** High confidence requires that the chain of custody and the treatment of samples before they reach the participating analytical laboratories be accurately known and without possibility of tampering, contamination or influences that might interfere with subsequent chemical analysis. Although the chain and conditions of custody are highly important, the discussion below is confined to chemical analytical and evaluation procedures once the environmental or biomedical samples from the field have arrived at the participating analytical laboratories. If maximum international credibility is desired, the sample collection should have been undertaken and documented by the OPCW Technical Secretariat and the analyses should then be done under its auspices. Circumstances may demand a formal triggering request from the UN Secretary-General, for example in cases where a state allegedly using chemical weapons is not party to the 1993 Chemical Weapons Convention.
- **Multiple laboratories.** High confidence in a positive finding would require that all participating laboratories, of which there should be at least two and preferably three, conclude without reservation that the agent or its distinctive breakdown products are present in the provided samples.
- **Blank and control samples.** The analyses must include suitable blank samples and control samples in matrices similar to those of the field samples. The blanks and controls should be provided by an outside laboratory (one not doing the analyses). Analyses of blanks and controls should be interspersed with analyses of the environmental and/or biomedical samples of interest. The identity and provenance of all samples should be unknown to the laboratories doing the work.
- **Methods.** Laboratory findings should be based on two different generally accepted methods of analysis based on different physical principles.
- **Laboratory experience.** The laboratories must have excellent prior records in such analysis. Some but not all of the national laboratories collaborating with the Technical Secretariat of the OPCW have such records.

- ***Independent Review.*** Laboratory methods and findings should be reviewed by an independent group of technically qualified and experienced experts with unimpeded access to laboratory personnel who had done the analyses and to their laboratory records. High confidence requires unanimous approval by the review group.

Matthew Meselson

1 May 2013

Appendix 2: 'Agent 15'

Excerpt from the current draft of *Disabling Chemical Weapons: A Documented Chronology*

980209Iraq. At a time of mounting pressure for renewed military action against Iraq, UK Defence Secretary George Robertson says to the British House of Commons that “Iraq may have possessed large quantities of a chemical weapons agent known as Agent 15 since the 1980s”. He refers the House to a paper by his ministry giving more details that he requests be published in the *Official Report*, which it is.¹⁵⁴ The paper includes the following: “The MOD has recently received intelligence, believed to be reliable, which indicates that, at the time of the Gulf War, Iraq may have possessed large quantities of a chemical warfare mental incapacitant known as Agent 15. Our knowledge of Agent 15 itself is limited. Agent 15 is one of a large group of chemicals called glycollates [of which BZ is the best known] ... We have known since 1985 that Iraq was investigating CW agents of this type [see also 901107], but the first indication of a specific interest in Agent 15 came in a brief reference contained in an Iraqi document, which we became aware of in August 1995 [see also 030311] and which stated that Iraq was carrying out laboratory research on this agent. The first indications that Iraq had possessed large stocks of Agent 15 came late last year”. The specific chemical structure of Agent 15 is not disclosed. A subsequent report from the MOD experimental station at Porton states that “Agent 15 has been used in animal studies at Porton Down, but not in any work involving humans”.¹⁵⁵

{*Editorial comment.* After the “45 minute” dossier and related mendacities, misinformation and disinformation about Iraqi weapons of mass destruction prior to the March 2003 invasion of Iraq, it is not easy to judge the credence that should be attached to this “Agent 15” story. More than a decade later, open sources still contain no corroboration of UK claims regarding ‘Agent 15’ nor any additional information about its chemical identity. This is true of all the detailed ex post reviews of the Iraqi chemical-weapons programme published by UNSCOM, the Iraq Survey Group, and UNMOVIC. The report from Porton quoted above stated that just two glycollates had been used in human volunteer studies there, namely BZ and N-methyl-4-piperidinyl isopropylphenylglycollate (MPIPG, known in America as EA 3834). As for the animal studies, which were conducted at Porton during the period 1962-74, the report states that they extended to 26 different glycollates. Of these 26 substances, the chemical structure only of ‘Agent 15’ was not given in the report, this “for non-proliferation reasons”, whatever that may mean. Is there any other available information that provides otherwise absent support for the UK MOD? Very little. In May 1986, the Australia Group in plenary session decided to add 31 chemicals to what was then the AG “warning list” of CW-agent precursors. Five of the new additions were glycollate-agent precursors, namely N-methyl-3-piperidinol, 3-quinuclidinol, methyl benzilate, benzilic acid and 3-quinuclidinone. The incapacitants that can be made from such precursors include agent BZ and, in the case of the piperidinol, the BZ forerunner known in America as CS 3245 and in Britain as T2506 [see 580915-26]. Of those five glycollate precursors on the AG list, only one – N-methyl-3-piperidinol – was later listed among the Iraqi holdings of precursor chemicals that were

¹⁵⁴ *Hansard (Commons)*, daily part, vol 306 no 115 cols 1-6, oral answers, 9 Feb 98, Mr George Robertson to Mr Winnick.

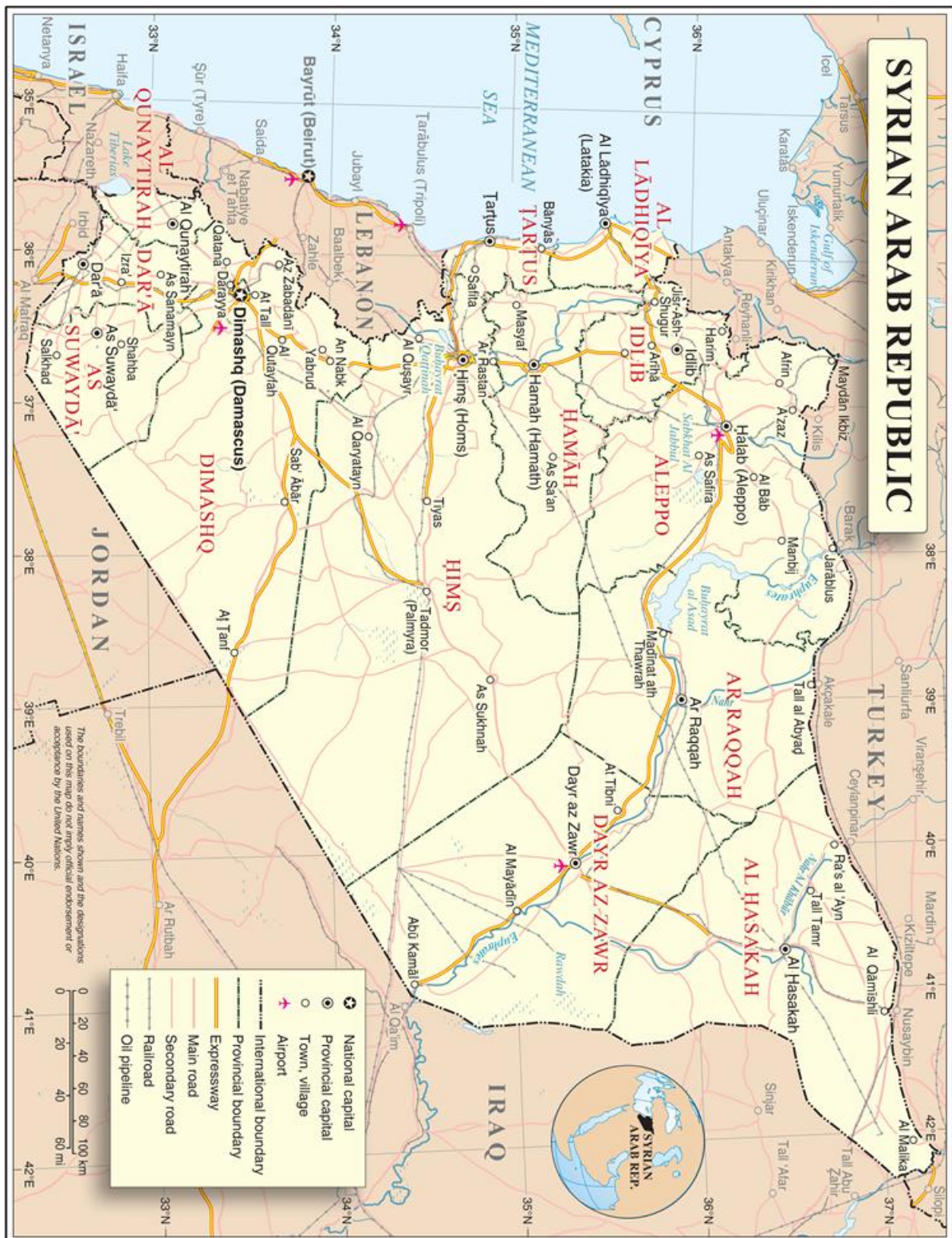
¹⁵⁵ Biomedical Sciences Department, CBD Sector [of Defence Evaluation and Research Agency] Porton Down, *An Overview of Research carried out on Glycollates and Related Compounds at CBD Porton Down*, DERA/CBD/CR990418, September 1999.

destroyed under UN auspices during the 1990s.¹⁵⁶ CS 3245, however, is one of the animal-tested glycollates whose chemical structures were identified in the Porton list. The Iraqi holdings of precursors destroyed under UN supervision also included mandelic acid, *aka* - hydroxyphenylacetic acid, but no other plausible glycollate precursors.¹⁵⁷ Are we to suppose, therefore, that, if 'Agent 15' is not a figment of someone's imagination, it is another name for N-methyl-3-piperidinyI phenylglycollate or some α -substituted congener thereof – perhaps a position isomer of EA 3834? Is that really at all likely?}

¹⁵⁶ UNMOVIC Compendium (2007), p 301.

¹⁵⁷ UNMOVIC Compendium (2007), p 300.

Map of the Syrian Arab Republic



The logo for HSPPOP features the letters 'HSP' in white and 'POP' in blue, set against a tan background. Below the main text, the full name 'HARVARD SUSSEX PROGRAM OCCASIONAL PAPER' is written in white, stacked vertically.

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