

JIC Assessment, 28 September 2006

IRAQI CHEMICAL WEAPONS: IMPLICATIONS OF RECENT FINDS

This paper was discussed and approved by the JIC at their meeting on 27 September 2006.

Key judgements

- I. All chemical warheads recovered to date in Iraq were produced pre-1991. They are not evidence of a concerted Iraqi plan to retain chemical weapons covertly post-1991 for future use. They were probably misplaced, carelessly disposed of or abandoned, but precisely when and why is not clear. Further recoveries are highly likely, but we cannot estimate how many will be found in total.
- II. Islamist extremists and other insurgents in Iraq aspire to carry out chemical attacks. The residual agent in sarin-based weapons could potentially generate a localised highly toxic hazard, greatest if targeted against crowded locations. Mustard weapons, if filled with agent, could still present a significant hazard in the hands of insurgents.

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| <p>Assessment Base: Recent finds of chemical weapons are the result of US-led operations to recover and destroy Iraqi chemical weapons in southern Iraq, the discovery of a number of canisters at Taji, and sporadic individual finds. We have seen the results of US chemical analysis of the small number of weapons sampled.</p> |
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IRAQI CHEMICAL WEAPONS: IMPLICATIONS OF RECENT FINDS

At the request of the JIC we consider the implications of recent chemical weapons finds in Iraq.

1. To date, some 895 confirmed and possible sarin-based chemical munitions have been recovered in Iraq. These can be broadly split into two large recoveries; a series of US-led operations to purchase chemical weapons in MND(SE) and recent US discoveries at Taji, a large military complex north of Baghdad. There have also been occasional individual finds by coalition forces and weapons volunteered by members of the Iraqi public. Small numbers of chemical warfare (CW) munitions designed to carry other agents have also been recovered, including 11 or 12 155mm mustard-based artillery rounds. However, none of these contained more than residual traces of mustard. At least one formed part of an improvised explosive device (IED) used by insurgents, although we judge that they were probably unaware that it contained CW.

MND(SE) recoveries

2. Some 545 sarin nerve agent warheads for 122mm rockets have been recovered in southern Iraq. The vast majority (around 465) have been recovered since September 2005 as part of US-led operations. With the exception of a small number sent to the US for further chemical analysis, all have been destroyed in theatre. We do not know the original sources or the sites where the warheads are being recovered, but judge that they are probably from former forward ammunition supply points in southern Iraq, and not the principal Iraqi CW storage depot at Al-Muthanna or any other large depot.

3. Based on limited photographic evidence the condition of the warheads has varied significantly. Some show signs of damage to the screw thread section consistent with either a deliberate effort to render them unusable or damage sustained trying to remove the warhead from the rocket, but we do not know which, or when it took place. The quantity of liquid fill also varies significantly, but it is estimated to average 50% to 60%. The US has sampled a small number of munitions; analysis revealed a degraded fill. Based on this analysis, previous Iraqi declarations and UNSCOM documents, **we judge that all the warheads recovered to date were produced pre-1991**. (UN Resolution 687, passed on 3 April 1991, called on Iraq to accept unconditionally the destruction, removal, or rendering harmless of all chemical and biological weapons, including stocks of agents, R&D, and support and manufacturing facilities).

4. **We judge that these warheads do not constitute evidence of a concerted Iraqi plan to retain chemical weapons covertly post-1991 in a viable state for future use.** We have seen no specific evidence of such planning by the Iraqi leadership. They may have remained at forward ammunition supply points for a number of reasons: careless disposal of time-expired or faulty weapons (Iraqi sarin had a relatively short shelf life); poor accounting by local military commanders; or simple loss or abandonment (possibly as late as 1991).

Taji Military Complex recoveries

5. Since April 2006 some 350 122mm CW-capable munitions have been recovered from a large military complex at Taji, which had links to Iraq's CW programme prior to 1991 (some chemical warhead manufacture and CW-related testing and training took place there). The discoveries were made when a US military patrol interrupted an attempt by an unidentified

individual to remove buried munitions from a previously unidentified site; photographic evidence suggests that the munitions were probably not neatly stacked when originally buried. The US plans to carry out further site exploitation at Taji.

6. A small number of the munitions had a liquid fill but, to date, no CW agents have been identified. More samples are being taken. UNSCOM visits dating back to 1991 report the presence of such munitions, but intrusive testing was not carried out. There are a wide number of possible explanations why these weapons exist, including poorly recorded Iraqi unilateral destruction; pre-1991 training (without CW agent); or discarded faulty munitions. However, in the absence of conclusive evidence these can only be speculative. On the limited evidence available, and in the absence of specific evidence of planning by the Iraqi leadership to retain chemical weapons for future use, **we judge that the recent finds at Taji are also not evidence of a concerted Iraqi plan to conceal and store chemical weapons post-1991.**

Prospects

7. It is unlikely ever to be possible to reconcile the tens of thousands of 122mm chemical weapons that the former Iraqi regime declared it had manufactured, used and destroyed with figures from UNSCOM or the findings of the Iraq Survey Group. **We judge that further recoveries of sarin-based chemical weapons are highly likely, but we cannot estimate how many will be found in total.**

8. Intelligence continues to show that Islamist extremists and other insurgents in Iraq aspire to carry out chemical attacks. We judge that, if some of the sarin warheads fall into the hands of insurgents, the residual agent could potentially generate a localised highly toxic hazard, but only if incorporated into IEDs and disseminated in an efficient manner. This threat is likely to be greatest if targeted against crowded locations. We judge that the threat from long distance launches is minimal given the poor physical condition of the warheads and the need to modify them before they can be attached to rockets.

9. To date, very few mustard-based weapons have been found. We do not know how many mustard weapons may still exist or where they might be. In the hands of insurgents such weapons, if filled with agent, could still present a significant health hazard.

ANNEX: IRAQI CHEMICAL WEAPONS: IMPLICATIONS OF RECENT FINDS

This annex has been produced to assess the impact the recent finds have on the 2004 review of previous JIC judgements on Iraqi WMD [JIC Assessment of 22 December 2004] and other relevant JIC papers.

Key Judgement

I. **The recent recoveries of chemical warheads in Iraq have not changed the conclusion of the 2004 review of past JIC judgements.**

1. In JIC(02)059, dated 15 March 2002, we judged that *"Iraq may retain some stocks of chemical agents"* and that *"following a decision to do so, Iraq could produce...significant quantities of sarin...within months"*. In 2004 we reviewed these judgements and concluded that they could not be substantiated by the findings of the Iraq Survey Group and other post-conflict activities. **We judge that the recent finds do not affect the conclusions of the 2004 review.** In JIC(02)059 we also assessed that *"Iraq...may have hidden small quantities of agents and weapons"*. **We judge that the recent recoveries neither substantiate nor disprove this assessment.**