

JIC Assessment, 9 September 2002

IRAQI USE OF CHEMICAL AND BIOLOGICAL WEAPONS – POSSIBLE SCENARIOS

Key Judgements

- I. Iraq has a chemical and biological capability and Saddam is prepared to use it.
- II. Faced with the likelihood of military defeat and being removed from power, Saddam is unlikely to be deterred from using chemical weapons by any diplomatic or military means.
- III. The use of chemical and biological weapons prior to any military attack would boost support for US-led action and is unlikely.
- IV. Saddam is prepared to order missile strikes against Israel, with chemical or biological warheads, in order to widen the war once hostilities begin.
- V. Saddam could order the use of CBW weapons in order to deny space and territory to Coalition forces, or to cause casualties, slow any advance, and sap US morale.
- VI. If not previously employed, Saddam will order the indiscriminate use of whatever CBW weapons remain available late in a ground campaign or as a final act of vengeance. But such an order would depend on the availability of delivery means and the willingness of commanders to obey.

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This paper assesses possible scenarios for Iraqi use of chemical and biological weapons and takes account of new intelligence that has recently become available on Iraq's intentions. It has an intelligence cut off point of 4 September.

1. Recent intelligence casts light on Iraq's holdings of weapons of mass destruction and on its doctrine for using them. Intelligence remains limited and Saddam's own unpredictability complicates judgements about Iraqi use of these weapons. Much of this paper is necessarily based on judgement and assessment.
2. Iraq used chemical weapons on a large scale during the Iran/Iraq war. Use on the same scale now would require large quantities of chemical weapons and survivable delivery means in the face of overwhelming US air superiority. Iraq did not use chemical weapons during the Gulf War. Intelligence suggests that Iraq may have used the biological agent, aflatoxin, against the Shia population in 1991. We do not believe that Iraq possesses nuclear weapons and there is no intelligence that Iraq is currently interested in radiological dispersal devices.

Chemical and biological capabilities

3. Based on intelligence on the nature of Iraqi CBW weapons, known delivery means, continuing procurement activity, and experience from previous conflicts, we judge that:
 - Iraq currently has available, either from pre Gulf War stocks or more recent production, a number of biological warfare (BW) and chemical warfare (CW) agents and weapons;
 - following a decision to do so, Iraq could produce significant quantities of mustard agent within weeks; significant quantities of the nerve agents sarin and VX within months (and in the case of VX Iraq may have already done so). Production of sarin and VX would be heavily dependent on hidden stocks of precursors, the size of which are unknown;
 - Iraq could produce more biological agents within days. At the time of the Gulf War Iraq had developed the lethal BW agents anthrax, botulinum toxin and aflatoxin. Iraq was also researching a number of other agents including some non-lethal (incapacitating) agents;
 - the commencement of large-scale production of chemical and biological agents would probably go undetected, and a decision to do so may already have been taken. The location of production facilities is unknown;
 - even if stocks of chemical and biological weapons are limited, they would allow for focused strikes against key military targets or for strategic purposes (such as a strike against Israel or Kuwait);
 - Iraq could deliver CW and BW agents by a variety of means including free fall bombs, airborne sprays, artillery shells, mortar bombs and battlefield rockets;

- Iraq told UNSCOM in the 1990s that it filled 25 warheads with anthrax, botulinum toxin and aflatoxin for its Al Hussein ballistic missile (range 650km). Iraq also admitted it had developed 50 chemical warheads for Al Hussein. We judge that Iraq retains up to 20 Al Husseins and a limited number of launchers;
- Iraq is also developing short-range systems Al Samoud/Ababil 100 ballistic missiles (range 150km plus) – One intelligence report suggests that Iraq has “lost” the capability to develop warheads capable of effectively disseminating chemical and biological agent and that it would take six months to overcome the “technical difficulties”. However, both these missile systems are currently being deployed with military units and an emergency operational capability with conventional warheads is probably available;
- Iraq may have other toxins, chemical and biological agents that we do not know about;
- the effectiveness of any CBW attack would depend on the method of delivery, concentration of the target, dissemination efficiency, meteorological conditions and the availability of suitable defensive counter measures.

Other recent intelligence indicates that:

- production of chemical and biological weapons is taking place;
- Saddam attaches great importance to having CBW, is committed to using CBW if he can and is aware of the implications of doing so. Saddam wants it to dominate his neighbours and deter his enemies who he considers are unimpressed by his weakened conventional military capability;
- Iraq has learned from the Gulf War the importance of mobile systems that are much harder to hit than large static sites. Consequently Iraq has developed for the military, fermentation systems which are capable of being mounted on road-trailers or rail cars. These could produce BW agent;
- Iraq has probably dispersed its special weapons, including its CBW weapons. Intelligence also indicates that chemical and biological munitions could be with military units and ready for firing within 20-45 minutes.

Intentions for use

4. Intelligence indicates that Saddam has already taken the decision that all resources, including CBW, be used to defend the regime from attack. One report states that Saddam would not use CBW during the initial air phase of any military campaign but would use CBW once a ground invasion of Iraq has begun. Faced with the likelihood of military defeat and being removed from power, we judge that it is unlikely there would be any way to deter Saddam from using CBW.

5. We judge that several factors could influence the timing of a decision by Saddam to authorise the use of CBW weapons;

- the availability of stocks of CW and BW agents;
- the survivability of his delivery means. Many are vulnerable. Once a military campaign is underway the pressure will increase to use certain assets before they are destroyed;
- the survivability of command and control mechanisms. The method of timing of such decision making is unknown. Intelligence indicates that Saddam's son Qusai may already have been given authority to order the use of CBW. Authorising front line units to use chemical and biological weapons could become more difficult once fighting begins. Saddam may therefore specify in advance of a war the specific conditions in which unit commanders should use these weapons e.g. once coalition forces have crossed a particular geographical line;
- the reliability of the units in question. Late in any military campaign commanders may not be prepared to use CBW weapons if they judge that Saddam is about to fall.

Possible scenarios: pre-emptive use before a conflict begins

6. The aim of a pre-emptive strike would be to incapacitate or kill Coalition troops in their concentration areas. Intelligence indicates that Saddam has identified Bahrain, Jordan, Qatar, Israel and Kuwait as targets. Turkey could also be at risk. Both chemical and biological weapons could be used; biological agents could be particularly effective against such force concentrations. But the use of CBW weapons carries serious risks and Saddam will weigh up their military utility against the political costs. Use of CBW weapons would expose the lies and deception about Iraq's WMD capabilities, undermining Iraqi diplomatic efforts and helping build support for rapid and effective US action. Saddam might also consider using non-lethal agents in a deniable manner; whilst it would be difficult to quickly establish a clear attribution of responsibility, Saddam could not be sure of the US reaction to an outbreak of a non-lethal disease.

7. The early, widespread use of CBW or non-lethal agents would affect Coalition military planning; disruption of the build-up of personnel and material could delay operations. On balance however we judge that the political cost of using CBW weapons would outweigh the military advantages and that Saddam would probably not use CBW weapons pre-emptively.

Possible scenarios: use during the ground phase of a conflict

8. There is no intelligence on specific Iraqi plans for how CBW would be used in a conflict. Large numbers of chemical munitions would need to be used to make a major battlefield impact. BW could also be used although it is less effective as a tactical weapon against Coalition units than CW. But the use of even small quantities of chemical weapons would cause significant degradation in Coalition progress and might contribute to redressing Coalition conventional superiority on the battlefield. Iraq could make effective use of persistent chemical agents to shape the battlefield to Iraq's advantage by denying space and territory to Coalition forces. Booby-traps and improvised explosive devices could be used as chemical and biological weapons to inflict local losses in urban areas. It is also possible that Saddam would seek to use chemical and biological munitions against any internal uprising; intelligence indicates that he is

prepared to deliberately target the Shia population. One report indicates that he would be more likely to use CBW against Western forces than on Arab countries.

Drawing Israel into the conflict

9. Launching a CBW attack against Israel could allow Saddam to present Iraq as the champion of the Palestinian cause and to undermine Arab support for the Coalition by sowing a wider Middle East conflict. Any use of chemical or biological warheads would make an Israeli response likely, even if the attack was not very effective. One intelligence report suggests that if Saddam were to use CBW, his first target would be Israel. Another intelligence report suggests that Iraq believes Israel will respond with nuclear weapons if attacked with CBW or conventional warheads. It is not clear if Saddam is deterred by this threat or judges it to be unlikely in the face of US pressure on Israel not to take such a course of action.

Unconventional use of CBW

10. Although there is no intelligence to indicate that Iraq has considered using chemical and biological agents in terrorist attacks, we cannot rule out the possibility. [...] Saddam could also remove his existing constraints on dealing with Al Qaida (extremists are conducting low-level work on toxins in an area of northern Iraq outside Saddam's control). Al Qaida could carry out proxy attacks and would require little encouragement to do so. Saddam's intelligence agencies have some experience in the use of poisons and even small-scale attacks could have a significant psychological impact. Intelligence indicates that Saddam has specifically commissioned a team of scientists to devise novel means of deploying CBW.

Possible scenarios: at the death

11. In the last resort Saddam is likely to order the indiscriminate use of whatever chemical and biological weapons remain available to him, in a last attempt to cling on to power or to cause as much damage as possible in a final act of vengeance. If he has not already done so by this stage Saddam will launch CBW attacks on Israel. Implementation of such orders would depend on the delivery means still remaining, the survivability of the command chain and the willingness of commanders to obey.