

INSPECTING IRAQ:

A HISTORY OF INSPECTION: FROM UNSCOM TO UNMOVIC

At the end of the Gulf War, the United Nations Security Council passed resolution 687, which set terms for a formal ceasefire between Iraq and coalition forces. Among other stipulations, this resolution required Iraq to “unconditionally accept the destruction, removal, or rendering harmless, under international supervision, of all chemical and biological weapons and all stocks of agents and all related subsystems and components and all research, development, support and manufacturing facilities.”¹ To ensure Iraqi compliance with resolution 687’s provisions on chemical and biological weapons (as well as additional conditions related to the dismantlement of Iraq’s missile programs), the Security Council created the United Nations Special Commission on Iraq (UNSCOM).²

The Inspection Process **1991**

The inspection process began on 18 April 1991 when the Iraqi government submitted its first declaration regarding its weapons of mass destruction programs. This declaration confirmed only the existence of a small chemical weapons program in Iraq. An agreement regarding conduct of on-site inspections was concluded in the early summer and the Iraqi government formally consented to the rights, privileges and access to facilities that inspectors would be granted. UNSCOM began inspections in August.

Soon after arriving in Iraq, inspectors received a written statement from the Iraqi government admitting to having conducted biological research for “defensive military purposes” from 1986-1990.³ The biological agents named as part of this research were anthrax, gas gangrene and botulism.⁴ In this same document, Iraq claimed that the program was abandoned in 1990 and all stocks were destroyed. This information had been omitted from the first declaration, confirming suspicions that the document was not complete. This resulted in the passage of resolution 707 which required Iraq to submit a new “full, final and complete declaration.”⁵

Initial inspections also found dual use equipment that could have been used in biological weapon research and production.⁶ Iraq also destroyed a facility at Salman Pak just one week before inspectors first visited the facility, where inspectors would eventually discover that Iraq conducted much of its research, development and testing of biological weapons.

¹ UN Security Council, resolution 687, S/RES/687 (1991), 8 April 1991.

² UNSCOM also had responsibility for the ensuring that Iraq destructed, removed, or rendered harmless “all ballistic missiles with a range greater than 150 kilometers and related major parts, and repair and production facilities.” The International Atomic Energy Agency also had an inspection team that was responsible for the same goals in the reference to nuclear weapons.

³ See <http://www.un.org/Depts/unscom/Chronology/chronologyframe.htm>.

⁴ *Bacillus anthracis*, *Clostridium perfringens* and *Clostridium botulinum* respectively.

⁵ Iraq was required to declare amounts, locations, and types of all items related to its chemical and biological weapons programs as part of Security Council resolution 687. The initial request in resolution 687 was not termed a “full, final and complete declaration.” That terminology was first used in resolution 707, passed in August. The reasoning for the new phraseology and breadth in resolution 707 was directly related to the quality (or lack thereof) of the initial declaration resulting from resolution 687. The initial declaration was added to as time passed and was therefore not complete in its original form. In resolution 707 it was implied that the declaration, once produced, should be absolute. Between 1991 and 1998, Iraq would submit three “full, final and complete declarations” regarding its chemical weapons program and five concerning its biological weapons program.

⁶ Dual-use equipment can be used both for legitimate industrial purposes or in a weapons program.

1992

In March 1992, Iraq submitted new declarations about its chemical and biological weapons programs.⁷ Iraq admitted to having more chemical weapons than previously stated but also claimed the weapons were unilaterally destroyed in the summer of 1991.⁸ In the biological weapons declaration, Iraq reiterated that it had only pursued a defensive program but provided no specifics as to what that program had entailed. Iraq also began to interfere in the inspection process.⁹

1993

Weapon inspections continued but were met with increasing Iraqi interference. Biological weapon inspectors, for example, were barred from entrance to the Baghdad University Veterinary School on the grounds that “inspections would violate the sanctity of an educational institution.”¹⁰ Chemical weapons inspectors also received information from governments of UN member states that indicated there were major gaps in Iraq’s statements about its chemical weapons activities.¹¹ Inspectors destroyed agents, munitions and precursor agents. By 6 December 1993 over 12,000 munitions had been destroyed by UNSCOM.

1994

Biological weapons inspectors evaluated needed steps to begin monitoring in Iraq.¹² Monitoring is the process of continued observation (via cameras and sustained inspection) to confirm the continued disarmament of a facility. Meanwhile questions continued to arise from the evidence gathered in inspections.¹³ Based on the information obtained thus far from inspections, collaborating governments, and technical talks with Iraq, UNSCOM concluded in the fall of 1994 that Iraq not only possessed an offensive biological weapons program, but that that program had produced tons of biological weapons. UNSCOM determined that the primary sites involved in Iraq’s biological weapons program were Al Hakem and Muthanna (see Annex 2 and maps).¹⁴

Case Study: Growth Media

One issue that began to arouse suspicions by biological weapon inspectors was the amount of bacterial growth media ordered by Iraq. Growth media is the substance used to grow bacterial cultures from small amount to larger quantities. Documents obtained from the Technical and Scientific Materials Import Division (the Iraqi agency responsible for procurement of materials for the biological weapon program) revealed that Iraq ordered over 650 kilograms of bacterial growth media in 1988 alone. Though Iraq claimed that the media was used in hospitals, their own estimates of hospital consumption were only 200 kilograms per annum, and the life span of growth media is only 4 to 5 years. Further raising suspicion was the fact that while growth media used for diagnostic purposes typically comes in 0.1 to 1 kilogram packages, the media imported by Iraq came in 25-100 kilogram drums. Questions about the fate of this quantity of growth media remain unanswered.

1995

UNSCOM confronted Iraq regarding the findings on its biological weapons program in February. Iraq responded with flat denials and issued another “full, final and complete declaration” in March that maintained

⁷ It admitted to more chemical weapons in March, and submitted declarations in May and June on chemical and biological weapons respectively.

⁸ Unilateral destruction of weapons without international supervision is in violation of resolution 687.

⁹ In one instance inspectors were barred from entering the Ministry of Agriculture. When the inspectors were let in after a standoff of nearly three weeks, they discovered that relevant items have been removed.

¹⁰ They were eventually admitted after a four-hour standoff.

¹¹ Information from governments primarily dealt with the materials that their own companies exported to Iraq that could be chemical-weapons related.

¹² Monitoring is the process of continued observation (via cameras and sustained inspection) to confirm the continued disarmament of a facility. Meanwhile questions continued to arise from the evidence they gathered.

¹³ In one inspection, UNSCOM discovered that staff were well trained in the study of anaerobic bacteria, a key section of Iraq’s biological weapons program, and possessed very expensive laboratory equipment.

¹⁴ Muthanna was also determined to be part of the chemical weapons program.

that the Iraqi biological program was limited and defensive. Because the UNSCOM inspectors found the declaration to be entirely contrary to the information already in their possession, no verification efforts were even attempted. After a stalemate over the validity of the declaration, Iraq finally admitted on 1 July 1995 to having had an offensive biological weapons program from 1986 to 1990. This resulted in yet another “full, final and complete declaration” which contained discrepancies in areas describing the extent of agent weaponization. Confirmation of inspectors’ suspicions about weaponization was provided by a defector, Hussein Kamel, a Lieutenant General and Director of Iraq’s Military Industrial Corporation. Kamel shared information on both the Iraqi chemical and biological programs. After his defection, Iraq declared its previous declaration(s) invalid. Again Iraq changed its story, admitting to a biological program that included additional agents, weaponization of agents, and involvement of more sites.

The chemical inspectors also confronted the Iraqis in 1995 with the gaps in their 1992 declaration. To answer some of these concerns, the Iraqis provided a new declaration in March 1995, but the inspectors continued to suspect omissions. In August, under continued pressure from UNSCOM, Iraq admitted to additional details concerning production of VX nerve agent.

1996

UNSCOM supervised destruction of Al Hakem, Iraq’s main facility for production of biological weapons. Iraq also issued two further declarations on both chemical and biological weapons. However, Iraq continued to interfere with inspections, barring inspectors’ access to many sites and blocking the removal of evidence.

1997

Eight times during 1997, the UN issued statements or resolutions chastising Iraq for obstructing inspections and requiring unconditional cooperation with UNSCOM. Chemical weapons inspectors finished destroying chemical agents, munitions, precursor agents and related equipment.¹⁵ Iraq’s October refusal to allow inspections including US inspectors led the majority of UNSCOM personnel to evacuate the country in mid-November. Russian opened negotiations with Iraq on behalf of UNSCOM. In the negotiations Russia gave Iraq assurances that the inspections would come to a conclusion as quickly as possible and sanctions would be lifted.¹⁶ The inspectors returned a week later and resumed inspections.

Again in 1997 Iraq submitted another full, final and complete declaration concerning its biological weapons program.

1998

Both the chemical and biological weapons inspectors conducted technical evaluation meetings that concluded that Iraq had not provided sufficient information to confirm disarmament. After initially continuing to block site access, Iraq officially suspended cooperation with UNSCOM on 5 August 1998. In negotiations to reopen inspections, Iraq refused to allow continued monitoring that would confirm sustained disarmament at sites. The United States and Britain began a military escalation in the Gulf that more than doubled US firepower in the region. These actions led to a short spate of cooperation. However, when Iraq again began to obstruct UNSCOM, the UN pulled out all inspectors on 16 December 1998. Hours later, the United States commenced three days of air strikes, called Operation Desert Fox. Iraq announced that the weapons inspections were finished.

1999

After multiple media reports about inspectors using inspections for intelligence gathering, the UN started a review on its policy towards Iraq. A panel charged with assessing the disarmament process identified many outstanding questions about the extent of Iraq’s chemical and biological weapon disarmament. To address these issues, it suggested a reinforced inspection regime that would be more intrusive than before. The panel also cautioned that the longer inspectors were out of Iraq, the greater the likelihood Iraq would reconstitute its

¹⁵ UNSCOM destroyed more than 38,000 munitions (both filled and unfilled with chemical agents), 690 tons of chemical warfare agents, 3,000 tons of precursor chemicals and approximately 600 pieces of chemical weapon related equipment.

¹⁶ The Russian assurances were in no way binding on the Security Council and therefore the sanctions continued.

chemical and biological weapons program. On 17 December 1999, the Security Council passed resolution 1284 which created a new inspection body called UNMOVIC (United Nations Monitoring, Verification and Inspection Commission) to replace UNSCOM. Though not entirely changed, UNMOVIC was somewhat different from UNSCOM—for example, to allay fears of government spies among the inspectors UNMOVIC inspectors are employees of the UN, not of member states.

UNMOVIC

Iraq refused access to UNMOVIC until 2002. During the intervening years, UNMOVIC assembled and trained its staff and conducted some remote surveillance of Iraq, drawing from open source information and intelligence materials from member states to produce quarterly reports that were submitted to the Security Council. In 2002, the Bush administration called upon the UN to act on Iraq's prolonged non-compliance with the relevant Security Council resolutions.¹⁷ The Security Council issued resolution 1441 on 8 November 2002, which required Iraq to readmit and fully cooperate with inspectors. Resolution 1441 declared Iraq was in material breach of multiple resolutions (including resolution 687) and this was its final opportunity. Iraq soon agreed to admit inspectors without conditions. UNMOVIC inspectors began inspections on 27 November 2002. The inspections included areas previously off-limits. Inspections continued until the UN withdrew UNMOVIC on 18 March 2003 prior to US military action.

¹⁷ Bush gave a speech on the 12 September 2002 to the UN. He implied that if the UN didn't act the US would.

Annex 1:

Table 1: Bulk BW Agents (from UNSCOM Final Compendium, Appendix III [S/1999/94]: 1/25/99)

Declaration(s)	UNSCOM Assessment	Comments
Botulinum toxin produced (10 to 20-fold concentrated) 19180 liters 5066.82 gallons	Insufficient documents to support quantities. Equipment and unaccounted for growth media do not support the figures. Quantities could be more at least double the stated amount.	Iraq bases this estimate on 1990 Al-Hakam report with extrapolations into 1989 and earlier.
<i>Bacillus anthracis</i> spores produced (10-fold concentrated) 8445 liters 2230.93 gallons	Insufficient documents to support quantities. Equipment and unaccounted for growth media does not support the figures. Quantities produced could be at least 3 times greater than stated.	Iraq bases this estimate on 1990 Al-Hakam report with extrapolations into 1989 and earlier.
Aflatoxin produced 2200 liters 581.18 gallons	Facilities, equipment, and personnel do not support production statements. Experts' assessments are that Iraq could not have produced the quantity of aflatoxin claimed, given the equipment, facilities and personnel stated by Iraq.	Iraq bases the production of 2200 litres on the 1990 Al-Hakam report.
<i>Clostridium perfringens</i> spores produced (10-fold concentrated) 340 liters 89.82 gallons	Insufficient documents to support quantities. Equipment and unaccounted for growth media does not support the figures. Quantities produced could be at least 15 times the quantity stated.	Iraq bases the 340 litres estimate on 1990 Al-Hakam report.
Ricin produced 10 liters 2.64gallons	Documents and interviews do not support account.	Based on an inaccurate account of Ricin activity.
Wheat Cover Smut Not quantifiable	Nothing to support statements.	The total quantities remaining are claimed to have been destroyed in July 1991.

Table 2: Bulk CW Agents (from UNSCOM Final Compendium, Appendix II [S/1999/94]: 1/25/99).

Iraq declared that 412.5 tons of bulk CW agents were available in Iraq as of January 1991. Of this amount, 411 tons were destroyed under UNSCOM supervision. Iraq claims it disposed of 1.5 tons of the CW agent VX but has provided no documentation to verify that.

Declaration(s)	UNSCOM Assessment	Comments
Mustard (20m ³ / 1m ³ containers) 295 tons	295 tons of mustard were destroyed by Iraq under UNSCOM supervision.	
Tabun (2m ³ containers) 76 tons	76 tons of tabun were destroyed by Iraq under UNSCOM supervision.	
Sarin and its mixtures (2m ³ containers) 40 tons	40 tons of sarin were destroyed by Iraq under UNSCOM supervision.	
VX (1m ³ containers) 1.5 tons	1) According to Iraq, 1.5 tons of VX were discarded unilaterally by dumping on the ground. 2) Traces of one VX-degradation product and a chemical known as a VX-stabilizer were found in the samples taken from the VX dumpsites. 3) A quantified assessment is not possible.	Iraq denied producing VX until Kamel's defection in 1995.

Annex 2:

Biological Sites (major facilities, as determined by UNSCOM):

1 - Salman Pak: Laboratory scale research on Anthrax, Botulinum toxin, Clostridium, perfringens (gas gangrene), mycotoxins, aflatoxins, and Ricin. Researchers at this site carried out toxicity evaluations of these agents and examined their growth characteristics and survivability. Located 40 km SE of Baghdad.

2- Al Hakum: This site was specifically designed and constructed as Iraq's main biological agent production facility. Prior to the Gulf War this facility produced thousands of litres of Anthrax and concentrated Botulinum toxin. Hundreds of litres of Clostridium perfringens were also produced. Located 60 km SW of Baghdad.

3 - Daura Foot and Mouth Disease Vaccine Facility. Also known as Al Manal, this site was taken over by the BW program in fall 1990. Site conducted initial research on viral warfare agents including: haemorrhagic conjunctivitis, human rota virus, and camelpox. The site was also used to produce thousands of litres of botulinum toxin. Located in Southeastern outskirts of Baghdad.

4 - The Agricultural and Water Resources Research Centre at Fudaliyah: Also known as Al Safa, this site was a dedicated aflatoxin production facility. Nearly 2000 litres of agent were produced. Site was converted from a scientific agricultural research station. Located in Northeastern outskirts of Baghdad.

5- Taji Single Cell Protein Plant: This site was converted for the production of hundreds of litres of Botulinum toxin in the late 1980s. Located 10 km NW of Baghdad.

6 - Muthanna State Establishment: Initial location for Iraq's BW program in 1985/86. Researchers at this site carried out initial toxins evaluations of several BW agents and examined their growth characteristics and survivability. Agents investigated include Anthrax, botulinum toxin, aflatoxin, and ricin. Muthanna also conducted small scale production of botulinum toxin. BW equipment moved to Salman Pak in 1987. Muthanna also provided weaponization expertise to the BW program, primarily CW munition technology and testing. Located 170 km NW of Baghdad.

Annex 3:

Chemical Sites (major facilities, as determined by UNSCOM):

1 - Muthanna State Establishment: This 5 km by 5 km facility was Iraq's primary chemical weapons research, development, and production facility. The site operated continuously from 1983 to 1991, producing thousands of tons of precursors, nerve agents and mustard gas. Chemical agents included mustard gas, Sarin, Tabun, and VX. From 1992 to 1994 the UNSCOM Chemical Destruction Group operated at this site to eliminate remaining precursor materials, destroy production plants and equipment, and hydrolyse or burn remaining chemical warfare agents. Located 120 km NW of Baghdad.

2 - Fallujah I: This site was intended to be an additional precursor production facility for the chemical weapons program. The facility was in the initial phases of construction at the time of the Gulf War. Located 60 km WNW of Baghdad.

3- Fallujah II: This facility produced chemical weapons precursors destined for the Muthanna site. Products included chlorine, phosphorous trichloride and oxychloride, thionyl chloride, and with high probability two direct nerve agent precursors. Remaining precursors and equipment were transferred to the Muthanna site for destruction under the supervision of the Chemical Destruction Group. Located 65 km WNW of Baghdad.

4 - Fallujah III: This site was in the late stages of construction at the time of the Gulf War. The facility, intended to support the Muthanna site, contained multi-purpose production plants. The intended products of this site remain unclear, but may be connected with the VX program. Located 70 km WNW of Baghdad.

5 - Muhammadiyat: This site was the primary storage area for filled chemical weapons. At the time of the Gulf War the site contained numerous CW munition, many filled with chemical agent. The UNSCOM teams, and the Chemical Destruction Group completed elimination of CW weapons that survived the bombardment. Located 140 km W of Baghdad.