Implementation of the Safeguards Agreement between the Republic of Iraq and the International Atomic Energy Agency pursuant to the Treaty on the Non-Proliferation of Nuclear Weapons

Report by the Director General
Vienna: 14 July 2003

Agency Activities in Iraq

1. Following persistent media reports of looting of nuclear and radioactive material at the Tuwaitha complex in Iraq, the Director General requested, and the Coalition Provisional Authority in Iraq (hereinafter the “Authority”) agreed, that the Agency would conduct an inspection, in accordance with the NPT safeguards agreement with Iraq, in order to verify the nuclear material subject to safeguards stored at Location C Nuclear Material Storage Facility near the Tuwaitha complex south of Baghdad. The inspection mission took place from 7 to 23 June 2003 and was carried out relying on the logistical support provided by the Authority. The nuclear material inventory at Location C Nuclear Material Storage Facility consists of low enriched, natural and depleted uranium in various chemical forms, and was last verified in December 2002.

2. The nuclear material inspected is housed in two buildings. Building 1 contains a large variety of uranium compounds, for example, UO$_2$, U$_3$O$_8$, UCl$_4$ and yellow cake. Building 2 contains only yellow cake and ammonium diuranate (ADU) waste. The inspection team found that some safeguards seals applied to the two buildings after the December 2002 inventory verification had been removed, as the team had been informed by the Authority prior to the start of the mission. The initial assessment showed that most of the interference with the inventory had taken place in Building 1, with only minor interference in Building 2.

3. In Building 1, many containers were missing, many others had been emptied, and a large floor area was covered by uranium compounds. The material on the floor was recovered and repackaged into new containers. As far as possible, the recovery operation was carried out according to material type, in order to make it possible to compare the recovered material against the inventory. The various uranium compounds were reverified. Many of the containers that were initially missing have been subsequently recovered. In Building 2, one drum of yellow cake was missing but its contents appeared to have been dumped onto the floor adjacent to where the drum was originally located. This material was recovered. The contents of two containers of ADU waste were also found spread on the floor and were recovered.

Assessment

4. The inspection team verified the nuclear material inventory at Location C Nuclear Material Storage Facility at Tuwaitha in accordance with Agency standards. The team’s estimate is that at least 10 kg of uranium compounds could have been dispersed; for instance,
a few grams of natural uranium compound could have remained in each of the approximately 200 emptied containers when upended by the looters, in the form of dust on the container walls or as material adhering to the bottom folds. The quantity and type of uranium compounds dispersed are not sensitive from a proliferation point of view. However, the Director General will request the Authority to make every effort to recover this dispersed material and, if and when the material is recovered, to return it to the Location C Nuclear Material Storage Facility and to place it under Agency safeguards.

5. In addition to the nuclear material stored at the Location C Nuclear Material Storage Facility, there is also nuclear material subject to safeguards stored at other locations in Iraq, principally material previously recovered from rubble. In this connection, the Director General will request the Authority to ensure the physical protection and security of the entire nuclear material inventory in Iraq.