

NUCLEAR MATERIAL IN IRAQ

"Whoever gave that order better check his retirement plan, because if we leave this place open somebody is going to lose their job."

- Army Lt. Col. Charles Allison, head of a special US Site Survey Team, when told to evacuate all US personnel from Tuwaitha, including troops providing security at the perimeter.

What nuclear material might be loose in Iraq?

We do not have complete information on what material might be found in Iraq, but there have been reports that dangerous substances or materials are present in the country:

- **Large scale industrial or medical 'radioactive sources'**, some of which appear to have been looted, probably including caesium-137 and cobalt-60. There are millions of these around the world, used by experts in industry, hospitals and universities, and they are potentially very dangerous to anyone who handles them incorrectly. The larger ones, containing a significant amount of radioactive material, could be used to make 'dirty' bombs. Looters could think such items are valuable scrap metal, as has happened in other countries; widespread contamination would result from recycling them as scrap. There were reportedly 1000 such sources of different sizes and types in Iraq, and 200 of them were reportedly stored at Tuwaitha's Location C, under IAEA seal. Looters have been filmed leaving the site carrying what appear to be such sources even after the US army 'secured' the facility.
- **500 tons of yellowcake**, a yellow powder containing uranium oxide that is slightly radioactive. It is very toxic if it enters the body, harming people mostly by affecting the kidneys, but also by its radiation in the longer term. There are many reports that people living near Tuwaitha took barrels from the nuclear site, emptied the yellowcake and used the barrels for storing food and water. Yellowcake would not be useful material for a 'dirty' bomb.
- **Enriched uranium**, 1.8 tons of which was stored under IAEA seals. This is more dangerous to people than yellowcake, particularly if it is inhaled, as it is more radioactive than naturally occurring uranium. We do not currently have information on whether any of this material is missing from the Tuwaitha facility, but the IAEA is currently checking the inventory. Enriched uranium could be used to make 'dirty' bombs.
- **Some laboratory equipment** from the huge but largely destroyed Tuwaitha complex appears to be missing. Even small, sealed sources could be dangerous to unskilled individuals handling them.
- **Nuclear waste** from the various research reactors that Iraq once ran at Tuwaitha could also be a significant danger to anyone who came near it or into direct contact with it while looking for things to take from the site.