

# Board of Governors

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# Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic

Report by the Director General

1. This report of the Director General to the Board of Governors is on the implementation of the NPT Safeguards Agreement in the Syrian Arab Republic<sup>1</sup> (Syria).

#### A. The Dair Alzour Site

2. On 2 June 2008, the Director General informed the Board of Governors that the Agency had been provided with information alleging that an installation at the Dair Alzour site in Syria, destroyed by Israel in September 2007, had been a nuclear reactor. The information further alleged that the reactor was under construction but not operational at the time of its destruction, and that it had been built with the assistance of the Democratic People's Republic of Korea (DPRK). By the end of October 2007, large scale clearing and levelling operations had taken place at the site which had removed or obscured the remains of the destroyed building.<sup>2</sup>

3. Syria has maintained, since May 2008, that the destroyed building was a non-nuclear military installation and that Syria had had no nuclear related cooperation with the DPRK.<sup>3</sup> While it cannot be excluded that the destroyed building was intended for non-nuclear use, the Agency has assessed that the features of the building and its connectivity to adequate pumping capacity of cooling water are similar to what may be found at nuclear reactor sites.<sup>4</sup> While Syria has indicated that its efforts to

<sup>&</sup>lt;sup>1</sup> INFCIRC/407.

<sup>&</sup>lt;sup>2</sup> GOV/OR.1206, para. 26 and GOV/2008/60, para. 16.

<sup>&</sup>lt;sup>3</sup> GOV/2008/60, para. 1 and GOV/2009/36, para. 15.

<sup>&</sup>lt;sup>4</sup> GOV/2008/60, paras 10 and 11.

procure pumping equipment and large quantities of graphite and barite were civilian and non-nuclear in nature, the Agency has assessed that these items could also support the construction of a nuclear reactor.<sup>5</sup> Additionally, the involvement of the Syrian Atomic Energy Commission (AECS) in some of the procurement and the inconsistency between end use information provided by the AECS and other information available to the Agency raise further questions regarding Syria's declarations of the civilian and non-nuclear nature of this procurement. Syria has also maintained that the particles of anthropogenic natural uranium found in samples taken during the Agency's June 2008 visit to the Dair Alzour site originated from the missiles used to destroy the building.<sup>6</sup>

4. As indicated in previous reports, the Agency has assessed that the probability that the particles originated from the missiles used to destroy the building is low. The Agency also assessed that there is a low probability that the particles were introduced by aerial dispersion. The presence of such uranium particles points to the possibility of nuclear related activities at the site and adds to questions concerning the nature of the destroyed building. Syria has yet to provide satisfactory explanations for the origin and presence of these particles.<sup>7</sup> In this context, information yet to be provided by Israel might be helpful in clarifying the matter.<sup>8</sup>

5. Syria's statements concerning the nature of the destroyed building, the Dair Alzour site, the three other locations allegedly functionally related to it, the procurement activities referred to above and the alleged foreign assistance are limited in detail and no supporting documentation has been provided by Syria. The information and access provided by Syria to date have not allowed the Agency to confirm Syria's statements regarding the non-nuclear nature of the destroyed building. Since the Agency's visit to the Dair Alzour site in June 2008, the Agency has made repeated requests to Syria for:

- information concerning the Dair Alzour site, the infrastructure observed at the site and certain procurement efforts which Syria has stated were related to civilian non-nuclear activities;
- access to technical documentation and any other information related to the construction of the destroyed building;
- access to locations where the debris from the destroyed building, the remains of munitions, the debris from equipment and any salvaged equipment had been and/or are now situated; and
- further access to the Dair Alzour site and access to three other locations allegedly functionally related to the Dair Alzour site.

6. Syria has maintained that, due to the military and non-nuclear nature of the Dair Alzour site and three other locations allegedly functionally related to Dair Alzour, it had no obligation to provide more information under its Safeguards Agreement with the Agency.<sup>9</sup> The Agency has explained to Syria that there is no limitation in comprehensive safeguards agreements on Agency access to information, activities or locations simply because they may be military related. The Agency has repeatedly offered to establish the necessary modalities for managed access to sensitive information and locations, including the Dair Alzour site and the three other locations.

<sup>&</sup>lt;sup>5</sup> GOV/2009/36, para. 14.

<sup>&</sup>lt;sup>6</sup> GOV/2008/60, para. 8.

<sup>&</sup>lt;sup>7</sup> GOV/2010/47, para. 5.

<sup>&</sup>lt;sup>8</sup> GOV/2009/36, para. 7.

<sup>&</sup>lt;sup>9</sup> GOV/2009/56, para. 9 and GOV/2008/60, para. 14.

7. As mentioned by the Director General in his 2 December 2010 statement to the Board of Governors, in a letter dated 18 November 2010, the Director General wrote to H.E. Walid Al-Moualem, Syria's Minister for Foreign Affairs, to request, inter alia, that Syria provide the Agency with prompt access to information and locations previously indicated by the Agency.

8. In a letter dated 6 February 2011 addressed to the Director General, Syria's Minister for Foreign Affairs stated that the Director General of the AECS would continue to work with the Agency to resolve all outstanding technical issues in accordance with Syria's commitments under the Agency's Statute, the Treaty on the Non-Proliferation of Nuclear Weapons and Syria's Safeguards Agreement.

9. Syria has not engaged substantively with the Agency on the nature of the Dair Alzour site since the Agency's June 2008 visit and, since August 2009, has not responded to the other issues noted in paragraph 5 above. The Agency continues to request Syria to provide access to the information, material, equipment and locations previously indicated by the Agency.

## **B.** Activities at Other Locations in Syria

10. As previously reported, particles of anthropogenic uranium of a type not included in Syria's reported inventory were found at the Miniature Neutron Source Reactor (MNSR) in 2008 and in 2009. Syria's initial explanations in June 2009 that the particles had originated either from standard reference materials used in neutron activation analysis or from a shielded transport container were not supported by the results of sampling carried out by the Agency.<sup>10</sup> During the November 2009 inspection, and contrary to its earlier statements, Syria explained that the anthropogenic particles had originated from previously unreported activities performed at the MNSR related to the preparation of tens of grams of uranyl nitrate using yellowcake produced at Homs.<sup>11</sup> At the March 2010 physical inventory verification (PIV), another small quantity of undeclared uranyl nitrate was found at the MNSR than previously declared to the Agency.<sup>12</sup> As reported earlier, Syria submitted inventory change reports in June 2010 for the newly declared material shown to the Agency during the PIV. However, inconsistencies between Syria's declarations and the Agency's findings remain unresolved.

11. As previously reported, during a meeting on 3 September 2010, agreement was reached with Syria on a plan of action for resolving these inconsistencies which included, inter alia, actions related to the amounts and use of nuclear material at the MNSR, scientific publications concerning uranium conversion experiments different from those declared by Syria to have occurred at the MNSR, indications of nuclear material under the control of the Waste Management Department of the AECS, and the Agency's requests for access to Homs. Syria's initial response to the plan of action did not provide the necessary clarifications.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> GOV/2009/75, para. 6.

<sup>&</sup>lt;sup>11</sup> A pilot plant for the purification of phosphoric acid was constructed and commissioned in 1997 at Homs, Syria, with the support of the United Nations Development Programme and the IAEA. Yellowcake was also produced as a result of the acid purification process. During a July 2004 visit to the Homs phosphoric acid purification plant, Agency inspectors observed some hundreds of kilograms of yellowcake.

<sup>&</sup>lt;sup>12</sup> GOV/2010/47, para. 10.

<sup>&</sup>lt;sup>13</sup> GOV/2010/63, paras 10, 11 and 12.

12. In a letter dated 9 February 2011, Syria informed the Agency that the Syrian "Authority approved [the] Homs visit, but detailed arrangement[s] of activities and date, have to be agreed upon between both sides; taking into consideration that [the] Homs location is not under the Safeguards obligations of Syria". In the letter, Syria requested that the Agency propose a meeting where arrangements could be made for that visit.

13. In a letter dated 18 February 2011, the Agency welcomed Syria's approval of an Agency visit to Homs and indicated that it looked forward to unrestricted access to the requested locations at Homs and the opportunity to perform the necessary activities at those locations. In the letter, the Agency also proposed a meeting in Damascus on 27 February 2011 to make arrangements for that visit and to perform activities at the Homs locations on 27 and 28 February 2011. Syria responded to the Agency's proposal by indicating that it was prepared to discuss the arrangements for the visit to Homs during a meeting in Vienna on 28 February 2011.

14. Based on the information currently provided by Syria, the Agency cannot draw conclusions regarding the origin of the anthropogenic natural uranium particles found at the MNSR. Additionally, the location and scope of conversion experiments and the quantities of purified uranium and commercial depleted uranium involved in those experiments remain unclear to the Agency.

## **C. Summary**

15. Syria has not cooperated with the Agency since June 2008 in connection with the unresolved issues related to the Dair Alzour site and the other three locations allegedly functionally related to it. As a consequence, the Agency has not been able to make progress towards resolving the outstanding issues related to those sites.

16. With the passage of time, some of the information concerning the Dair Alzour site is deteriorating or has been lost entirely. It is critical, therefore, that Syria actively cooperate with the Agency on these unresolved safeguards implementation issues without further delay.

17. Concerning the MNSR, Syria's responses to date under the agreed plan of action do not resolve the inconsistencies identified by the Agency. For the Agency to draw conclusions about the source of the uranium particles at the MNSR, it is essential that Syria provide further clarification regarding outstanding inconsistencies.

18. The Agency considers that the letter from Syria's Minister for Foreign Affairs stating that the AECS would continue to work with the Agency to resolve all outstanding technical issues, together with the recent communication by Syria that it has approved the Agency's proposed visit to Homs, could represent a step forward.

19. The Director General urges Syria to bring into force an Additional Protocol to its Safeguards Agreement, which would further facilitate the Agency's work in verifying the correctness and completeness of Syria's declarations.

20. The Director General will continue to report as appropriate.