# The IAEA's Latest Iran NPT Safeguards Report: No Progress, No Accountability?

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"The lack of progress in clarifying the Agency's questions concerning the correctness and completeness of Iran's safeguards declarations seriously affects the ability of the Agency to provide assurance of the peaceful nature of Iran's nuclear program." --IAEA Director General Rafael Grossi

This analysis summarizes and assesses information in the International Atomic Energy Agency (IAEA's) periodic safeguards report, *NPT (Nuclear Non-Proliferation Treaty) Safeguards Agreement with the Islamic Republic of Iran*, the most recent of which was issued on May 31, 2021. The IAEA reports that no progress was made in its investigation into Iran's undeclared nuclear material and activities, an inquiry that began anew in 2018; Tehran continues to stonewall IAEA requests for documentation, information, and explanations. As a result, the IAEA issues an atypical condemnation of Iran's cooperation, "The lack of progress in clarifying the Agency's questions concerning the correctness and completeness of Iran's safeguards declarations seriously affects the ability of the Agency to provide assurance of the peaceful nature of Iran's nuclear program."

The IAEA Board of Governors will next meet from June 7 to 11. Since 2003, in instances when the IAEA has issued strong reports underscoring Iran's lack of cooperation, the Board has reacted, giving the IAEA the needed support to pursue Iran's compliance with its legal non-proliferation obligations.

# Four Locations of Interest<sup>2</sup>

Since 2018, the IAEA has sought access to and information about four sites relevant to potentially undeclared nuclear material and activities in Iran. The agency reports receiving no

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<sup>&</sup>lt;sup>2</sup> For descriptions of these four locations and their relationship to today, see David Albright with Sarah Burkhard and the Good ISIS Team, *Iran's Perilous Pursuit of Nuclear Weapons* (Washington, D.C.: Institute for Science and International Security Press, 2021).

new information from Iran, and thus no tangible progress since its previous report in February 2021.<sup>3</sup>

## Location 1: Turquz-Abad warehouse

Location 1 is an open-air warehouse in the Turquz-Abad district of Tehran which held cargo containers that purportedly contained nuclear-related equipment and material.<sup>4</sup> In 2018, the IAEA observed activities consistent with sanitization at the site. Commercial satellite imagery confirms this activity and documents the earlier, speedy removal of all shipping containers.<sup>5</sup>

The IAEA requested access to the site and took environmental samples in February 2019, nevertheless detecting the presence of processed natural uranium particles that Iran had potentially produced through undeclared uranium conversion activities. Through additional analysis, and as conveyed to Iran in September 2020, traces of isotopically altered uranium particles were detected as well, including "low enriched uranium with a detectable presence of U-236, and of slightly depleted uranium." A footnote in the IAEA report states that "that the compositions of these isotopically altered particles were similar to particles found in Iran in the past, originating from imported centrifuge components." Iran has not provided the IAEA with the "necessary, full and technically credible" explanation for the presence of the particles.

#### Location 2: Lavizan-Shian

Location 2 is Lavizan-Shian, a former headquarters of Iran's early nuclear weapons program. Iran razed the site in 2003 and 2004 as the IAEA's investigation into its covert nuclear program intensified.<sup>6</sup> The IAEA seeks information from Tehran about "the possible presence at this site between 2002 and 2003 of natural uranium in the form of a metal disc, with indications of it having undergone drilling and processing..." This metal disk is apparently part of nuclear weapons related work detailed in Iran's Nuclear Archive, portions of which were seized in 2018 by Israel and turned over to the IAEA. Among the files was information about Iran's work on producing uranium deuteride for a neutron initiator used in nuclear weapons. The information

 <sup>&</sup>lt;sup>3</sup> See: David Albright, Sarah Burkhard, and Andrea Stricker, "The IAEA's Latest Iran NPT Safeguards Report: Tehran Continues to Stonewall Inspectors," *Institute for Science and International Security*, February 21, 2021, <u>https://isis-online.org/isis-reports/detail/the-iaeas-latest-iran-npt-safeguards-report-tehran-continues-to-stonewall#ref10</u>
<sup>4</sup> John Irish and Arshad Mohammed, "Netanyahu, in U.N. Speech, Claims Secret Iranian Nuclear Site," *Reuters*, September 27, 2018, https://www.reuters.com/article/us-un-assembly-israel-iran/netanyahu-in-un-speech-claims-

secret-iranian-nuclear-site-idUSKCN1M72FZ

<sup>&</sup>lt;sup>5</sup> The IAEA's report again indicates that the agency only began observing Iran's relocation of cargo containers and sanitization activities in November 2018. Yet, the agency was informed of these activities prior to the summer of 2018 and did not request to visit the site until Iran had completely emptied and sanitized it. See: David Albright, Sarah Burkhard, Olli Heinonen, and Frank Pabian, "Presence of Undeclared Natural Uranium at the Turquz-Abad Nuclear Weaponization Storage Location," *Institute for Science and International Security*, November 20, 2019, https://isis-online.org/isis-reports/detail/presence-of-undeclared-natural-uranium-at-the-turquz-abad-nuclear-weaponiza

<sup>&</sup>lt;sup>6</sup> David Albright, Paul Brannan, and Andrea Stricker, "The Physics Research Center and Iran's Parallel Military Nuclear Program," *Institute for Science and International Security*, February 23, 2012, <u>https://isis-online.org/uploads/isis-reports/documents/PHRC report 23February2012.pdf</u>

detailed procedures Tehran used to make uranium deuteride, including drilling into a piece of uranium metal.<sup>7</sup> From the archive files and information available to the Institute, the location for this work could not be pinpointed, but there are files Israel could not share publicly due to their proliferation-sensitive nature.

To conduct additional verification activities related to this matter, in September 2020 the IAEA visited a separate, declared facility "where uranium metal had been produced previously," which the Institute identified as the Jabr Ibn Hayan Multipurpose Laboratory (JHL) at the Tehran Nuclear Research Center. According to the report, "The purpose of these additional activities was to verify whether the natural uranium in the form of a metal disc identified at Location 2 was present at this declared facility." The IAEA's findings from its visit were inconclusive and Iran has yet to provide answers to the agency's questions. The agency plans to carry out yet additional verification activities at JHL, although the purpose of another visit is not given in the report.

# **Location 3: Tehran Site**

Location 3 is identified in the Nuclear Archive as the Tehran site, a secret former pilot uranium conversion plant of the Amad Plan.<sup>8</sup> The IAEA corroborated archive evidence that Iran may have used the site for "possible use or storage of nuclear material and/or conducting of nuclear-related activities, including research and development activities related to the nuclear fuel cycle. This location may have been used for the processing and conversion of uranium ore, including fluorination, in 2003," the IAEA added. Iran demolished the site in 2004.

The IAEA originally asked for access to the site in January 2020, but Iran refused until August 2020. The IAEA took environmental samples, indicating the presence of undeclared man-made uranium particles. Iran has yet to answer the IAEA's questions about the site and account for the presence of nuclear material.

#### **Location 4: Marivan Site**

Location 4 is the formerly secret Marivan site, near Abadeh, another Amad Plan facility identified in the Nuclear Archive.<sup>9</sup> The IAEA corroborated Iran's "possible use and storage of

<sup>&</sup>lt;sup>7</sup> A slide from an Iranian presentation in the archive lists subproject 3/20 (alternatively 3.20) as in charge of manufacturing UD<sub>3</sub>, where, according to the design, this type of source is to be used in the "main system," code for nuclear weapon. The slide summarizes in a credible manner how to make UD<sub>3</sub>, starting with uranium metal chips and deuterium gas. See: "Neutron Source: Iran's Uranium Deuteride Neutron Initiator," *Institute for Science and International Security*, May 13, 2019, <u>https://isis-online.org/isis-reports/detail/neutron-source-irans-uranium-deuteride-neutron-initiator-1/ and *Iran's Perilous Pursuit of Nuclear Weapons*.</u>

<sup>&</sup>lt;sup>8</sup> David Albright, Sarah Burkhard, and Frank Pabian, "The Amad Plan Pilot Uranium Conversion Site, Which Iran Denies Ever Existed," *Institute for Science and International Security*, November 9, 2020, <u>https://isis-online.org/isis-reports/detail/the-amad-plan-pilot-uranium-conversion-site/8</u>

<sup>&</sup>lt;sup>9</sup> David Albright, Sarah Burkhard, and Frank Pabian, "Abadeh is Marivan: A Key, Former Secret Nuclear Weapons Development Test Site," *Institute for Science and International Security*, November 18, 2020, <u>https://isis-online.org/isis-reports/detail/abadeh-is-marivan-irans-former-secret-nuclear-weapons-development-test-site</u>

nuclear material" at the site, "where outdoor, conventional explosive testing may have taken place in 2003, including in relation to testing of shielding in preparation for the use of neutron detectors. From July 2019 onwards, the Agency observed activities consistent with efforts to sanitize part of the location."

Along with the Tehran site, the IAEA sought access to Marivan in January 2020, but Iran refused. Iran finally granted access in August 2020, and the IAEA took environmental samples that revealed the presence of uranium particles. During recent technical discussions, Iran provided oral and written statements, but failed to provide substantiating documents, and the statements did not address the IAEA's questions about the site. Iran has yet to answer the IAEA's questions about this site or account for its finding of nuclear material.

# Modified Code 3.1

Iran informed the IAEA in February that that it had stopped the implementation of Modified Code 3.1 of the subsidiary arrangements to its comprehensive safeguards agreement, which entails notifying the IAEA as soon as a decision is taken to build a new nuclear facility. The IAEA reminded Iran that modified Code 3.1 is a legal obligation that cannot be modified unilaterally and "that there is no mechanism in the Safeguards Agreement for the suspension of implementation of provisions agreed to in the Subsidiary Arrangements." In response, Iran informed the agency that it "does not have a plan to construct a new nuclear facility in the near future."

#### IAEA Condemnation of Iran's Lack of Cooperation

The IAEA's report is more condemnatory than previous reports regarding Iran's lack of cooperation. It states, "The presence of multiple uranium particles of anthropogenic origin at three locations in Iran not declared to the Agency, as well as the presence of isotopically altered particles at one of these locations, is a clear indication that nuclear material and/or equipment contaminated by nuclear material has been present at these locations."

The IAEA also writes, "After many months, Iran has not provided the necessary explanation for the presence of the nuclear material particles at any of the three locations where the Agency has conducted complementary accesses. In the absence of such an explanation from Iran, the Agency is deeply concerned that nuclear material has been present at the three undeclared locations in Iran and that the current locations of this nuclear material are not known by the Agency. Nor has Iran answered the Agency's questions with regard to the other undeclared location, or clarified the current location of natural uranium in the form of a metal disc."

Since the IAEA's last report, the IAEA met with Iranian officials in Vienna "to compare technical understandings of the activities that may have taken place at the locations identified by the Agency, discuss in further technical detail the Agency's observations on the information that had been provided to it so far by Iran, and obtain from Iran any additional elements and information needed to clarify the underlying issues." Iran "provided an oral statement

regarding activities that Iran stated had taken place at Location 4 and which Iran deemed relevant to Location 4, and undertook to provide a written explanation and substantiating documents," but did not address the IAEA's questions about the site; substantiating documents were not provided. Iran provided no further information about Locations 1, 2, and 3. It stated it would provide more information about Locations 1 and 3.

Director General Rafael Grossi voices his concern in the report, stating, "technical discussions between the Agency and Iran have not yielded the expected results" and there is a "consequent lack of progress in clarifying the safeguards issues outlined above." The Director General "reiterates the requirement for Iran to clarify and resolve these issues without further delay by providing information, documentation and answers to the Agency's questions."

In a letter dated May 24, 2021, the Director General told Iran, "In the course of the bilateral discussions that had taken place so far, the absence of either answers to the Agency's questions or any substantiating documents had made it evident that substantive work was still required."

Iran responded by inviting the IAEA to Tehran for a meeting on June 21. This date, notably, is just after Iran's presidential election of June 18 and just before an IAEA-Iran temporary monitoring agreement is set to expire on June 24. As of the latter date, Iran threatens to erase IAEA surveillance and monitoring data if it does not receive sanctions relief under the 2015 Iran nuclear deal, or Joint Comprehensive Plan of Action (JCPOA).<sup>10</sup> Iran and the P5+1 are currently engaged in diplomatic talks on how to reestablish U.S. and Iranian compliance with the accord following U.S. withdrawal in 2018 and Iran's drawdown of its commitments.<sup>11</sup>

Earlier, in February, the IAEA accepted discussions scheduled a month ahead of time, but now the IAEA indicates that it would no longer accept such delay, notifying Iran that the June 21 date suggested by Iran for the next discussion "would prolong the process that should be concluded without delay."

# **Board Must Hold Iran to Account**

It is imperative that the Board of Governors seek a new resolution at the June meeting to condemn Iran's lack of cooperation with the IAEA's investigation. At the last Board meeting, a condemnatory resolution was pulled at the last minute because Iran agreed to make progress on these safeguards issues, something that has not occurred.

At this Board meeting, IAEA member states should also consider a resolution referring Iranian non-compliance to the UN Security Council.

<sup>&</sup>lt;sup>10</sup> Francois Murphy and Parisa Hafezi, "Iran and IAEA Extend Monitoring Deal, Averting Crisis in Nuclear Talks," *Reuters*, May 24, 2021, <u>https://www.reuters.com/world/middle-east/iran-has-told-iaea-it-is-extending-monitoring-deal-month-website-2021-05-24/</u>

<sup>&</sup>lt;sup>11</sup> "Ongoing JCPOA Talks in Vienna Could be Final Round: Iranian Spokesman," *Tasmin News*, May 31, 2021.

Critical to these efforts is U.S. and European backing -- all strong supporters of the nonproliferation regime -- which stands to be seriously weakened by Iran's refusal to cooperate with the IAEA's attempt to determine if Iran's declaration under the Comprehensive Safeguards Agreement is both complete and correct.

Although Iran claims the JCPOA ended the IAEA's inquiry into its past nuclear activities, the IAEA never agreed to that condition, nor could it. The IAEA stated that new information would lead to the re-opening of the investigation. According to Director General Grossi in an interview with *The Guardian*,<sup>12</sup> "We found traces of uranium that has been subject to industrial processing in different places, which had not been declared by Iran. That is a big problem. Some people banalise this and say 'this is old stuff'. We have to get to the bottom of this, not for any academic obsession of the director general but because it is non-proliferation relevant." He added, "My responsibility is the credibility and integrity of the non proliferation regime. I could say 'don't say anything', but then five years down the line something happens, and then it is a dereliction of duty on our part." He concluded, "We know that something happened here. There is no way round it. We have found this. There was material here. When was this? What has happened with this equipment? Where is the material. They have to answer."

Unless the Board acts decisively, a stalemate may occur. This stalemate could seriously undermine the integrity of the NPT and create dangerous precedents sure to be imitated by other states seeking to defy IAEA access or resist providing the IAEA with complete nuclear declarations. It also signals to other states that after months of nuclear stonewalling, Iran gets sanctions relief and is permitted to maintain its enrichment activities, while the international community fails to redress Tehran's safeguards breaches. The IAEA's integrity is at stake in a very real sense if the Board does not support its investigation.

Under the present circumstances, any re-establishment of the JCPOA will be under a very dark cloud, signaling that the United States and the E3 favor temporary nuclear limits on Iran's nuclear program more than preventing the erosion of IAEA inspections or insisting on Iran providing the necessary cooperation for the IAEA to determine if Iran's safeguards declaration is correct and complete. World leaders, in essence, would choose convenience rather than doing the difficult but critical work to determine if Iran's nuclear program is peaceful.

<sup>&</sup>lt;sup>12</sup> Patrick Wintour, "Iran's failure to explain uranium traces is 'big problem', says IAEA chief," *The Guardian*, May 26, 2021, <u>https://www.theguardian.com/world/2021/may/26/iran-failure-explain-uranium-traces-big-problem-iaea-un</u>