

**COMPLIANCE WITH
THE CONVENTION ON THE
PROHIBITION OF THE DEVELOPMENT, PRODUCTION,
STOCKPILING AND USE OF CHEMICAL WEAPONS AND ON
THEIR DESTRUCTION
Condition (10)(C) Report**



April 2021

Prepared by the U.S. Department of State

**CONDITION (10)(C) ANNUAL REPORT ON
COMPLIANCE WITH THE CHEMICAL WEAPONS CONVENTION (CWC)**

This Report is submitted consistent with Condition (10)(C) of the Resolution of Advice and Consent to Ratification of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC). The Convention was ratified by the United States on April 25, 1997, and entered into force on April 29, 1997. This reports covers the period January 1 through December 31, 2020.

Condition (10)(C) provides that the President shall submit on January 1 annually to the Committee on Foreign Relations of the Senate and the Committee on International Relations of the House of Representatives a full and complete classified and unclassified report setting forth—

(i) a certification of those countries included in the Intelligence Community's (IC) Monitoring Strategy, as set forth by the Director of Central Intelligence's Arms Control Staff and the National Intelligence Council (or any successor document setting forth intelligence priorities in the field of the proliferation of weapons of mass destruction (WMD)) that are determined to be in compliance with the Convention, on a country-by-country basis;

(ii) for those countries not certified pursuant to clause (i), an identification and assessment of all compliance issues arising with regard to adherence of the country to its obligations under the Convention;

(iii) the steps the United States has taken, either unilaterally or in conjunction with another State Party:

- (I) to initiate challenge inspections of the noncompliant party with the objective of demonstrating to the international community the act of noncompliance;
- (II) to call attention publicly to the activity in question; and
- (II) to seek on an urgent basis a meeting at the highest diplomatic level with the noncompliant party with the objective of bringing the noncompliant party into compliance;

(iv) a determination of the military significance and broader security risks arising from any compliance issue identified pursuant to clause (ii); and

(v) a detailed assessment of the responses of the noncompliant party in question to action undertaken by the United States described in clause (iii).

It is the view of the United States that, in most cases, efforts to resolve compliance concerns discovered through review of declarations or inspection results should first be attempted through diplomatic means. This does not preclude or prevent the escalatory step of requesting challenge inspections, but diplomatic outreach is an initial mechanism to attempt to resolve compliance concerns before the need to resort to challenge inspection requests.

For its part, both as a matter of national policy and as a guide to national policy, the United States undertakes its own independent review – based upon the best available information, including intelligence information – of the compliance of CWC States Parties with their obligations under the Convention. The United States believes that CWC States Parties should be held to their obligations under the CWC, and places a high premium upon their compliance with specific declaration and implementation provisions (e.g. Articles III, IV, V, VI, and VII) and the “general obligations” provision under Article I.

Information and assessments in this report are current as of December 31, 2020. This report highlights developments since the conclusion of the reporting period included in the previous Condition (10)(C) Report, and to the extent possible, refrains from repeating older information found in previously submitted reports.

The United States continues to take extraordinary steps to address CWC non-compliance and restore CW deterrence, bilaterally and in close coordination with Close Allies and like-minded states.

- The United States continues to play an instrumental role in the Partnership against Impunity for the Use of Chemical Weapons (“the Partnership”), a French-led initiative created in 2018 in which participating states made a political commitment to increase pressure on those responsible for the use of CW. As of December 2020, the Partnership had 40 members, plus the European Union.
- In April 2020, as a result of the special Conference of the States Parties (CSP) decision in June 2018, the Organization for the Prohibition of Chemical Weapons (OPCW) Investigation and Identification Team (IIT) issued its first report, which identified the Syrian Arab Air Force as the perpetrators of three chemical weapons (CW) attacks in Syria. Subsequently, the United States, with a cross-regional group of responsible States Parties, put forth an OPCW Executive Council decision, which was adopted in July 2020, and which condemned Syria for its use of chemical weapons and identified measures for Syria to take to redress the situation, including with respect to the IIT report and long-standing concerns with Syria’s

initial CWC declaration. In October 2020, the Director-General issued a report confirming that Syria had not completed any of those measures. As a result, the United States and 47 like-minded countries submitted a draft decision for consideration at the next Conference of the States Parties in accordance with Article XII that would suspend Syria's rights and privileges under the CWC until it fulfills the measures set forth in the July 2020 EC decision. The decision will be taken up in April 2021 when the CSP resumes. (Due to COVID restrictions in the Netherlands and the health and safety of all delegations, CSP-25 convened in November only to address the OPCW budget and all other agenda items were deferred to the resumption of the CSP in April 2021.)

- In response to the Russian use of a Novichok agent against the Skripals in March 2018, the United States, along with its co-sponsors Canada and the Netherlands, proposed adding two novichok chemical families to Schedule 1 of the CWC Annex on Chemicals, marking the first time Schedule 1 chemicals (chemical warfare agents) were added to the CWC Annex on Chemicals since the CWC entered into force. This change entered into force in June 2020. Further, the United States joined a broad group of countries to issue joint statements at EC and CSP sessions in 2020 condemning the assassination attempt against Aleksey Navalny.
- The United States continued efforts throughout the reporting period to address non-compliance by Syria, Russia, Iran, and Burma.
- Further, the United States engaged in bilateral efforts to encourage certain OPCW members to pay their arrears, so their voting rights could be reinstated.

In 2020, the United States, with allies and other partners, again, worked to ensure the CSP agreed to provide the necessary resources to the OPCW, to fulfill its mandate, including continued work by the IIT.

The OPCW Technical Secretariat (TS) reported, as of July 31, 2020, the following regarding Article VII implementation:

1. Somalia and Timor-Leste, which became States Parties in 2013 and 2003, respectively, have not yet designated a National Authority.
2. Seventy-six States Parties had not yet notified the TS of the adoption of implementing legislation and/or regulations that cover all the initial measures (scheduled chemical transfers, prohibitions, penalties, extraterritorial obligations, legal basis of regulations, establishment of national authority, and other initial measures). They were: Afghanistan, Andorra, Angola, Antigua and Barbuda, Armenia, The Bahamas, Bahrain, Barbados, Benin, Bhutan, Bosnia and

Herzegovina, Brunei Darussalam, Burma, Cabo Verde, Chad, , Congo, Cook Islands, Cote d'Ivoire, Democratic Republic of the Congo, Djibouti, Dominica, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Eritrea, Eswatini, Gambia, Ghana, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Iceland, Iraq, Jamaica, Kenya, Kuwait, Lao People's Democratic Republic, Lebanon, Libya, Malawi, Mali, Marshall Islands, Mongolia, Mozambique, Namibia, Nauru, Nepal, Niger, Nicaragua, Nigeria, Papua New Guinea, Philippines, Rwanda, Samoa, San Marino, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, Suriname, Syria, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tuvalu, United Republic of Tanzania, Uruguay, Venezuela, , and Zimbabwe.

3. One State Party, Tonga, has not yet submitted its required initial declarations (due July 28, 2003) pursuant to the Convention. The TS is unable to fulfill its verification tasks with regard to this State Party. The United States made efforts in 2020 to encourage Tonga to prepare and submit its initial Declaration.

As of December 31, 2020, there were 192 CWC States Parties.^a Four States have neither ratified nor acceded to the CWC and, therefore, are not States Parties to the Convention (one signatory State, Israel, and three non-signatory States, Egypt, North Korea, and South Sudan).

Four States Parties, Burma, Iran, Russia, and Syria, are certified in non-compliance with the CWC. Russia and Syria were first certified in non-compliance in April 2018. Iran was first certified in non-compliance in November 2018. Burma was certified in non-compliance in 2019. Additional information is available in the 2021 classified Condition 10(C) Report and its Annex.

COUNTRY ASSESSMENTS

BURMA

FINDING

The United States certifies that Burma is in non-compliance with the CWC, due to its failure to declare its past CW program and destroy its historical CW production facility (CWPF). The United States has concerns that a CW stockpile may remain at Burma's historical CW facility.

^a On May 18, 2018, the Palestinians deposited a purported instrument of accession to the CWC. On June 18, 2018, the United States submitted to the UN Secretary General, the Depositary for the CWC, a letter detailing U.S. objections to the purported accession of the "State of Palestine" to the CWC. This letter was circulated to all States Parties by the Depositary.

ANALYSIS OF COMPLIANCE CONCERNS

In accordance with CWC Article I, paragraph 1(a), each State Party undertakes never under any circumstances “to develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone.” In accordance with CWC Article I, paragraph 2, each State Party undertakes to destroy chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention. The United States assesses Burma had a CW program in the 1980s that included a sulfur mustard development program and a CWPF near Tonbo. CW agent and production equipment may remain at Tonbo.

In accordance with CWC Article I, paragraph 4, each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention. Despite ratifying the CWC in 2015, Burma has retained a facility assessed to have housed key components of its historical CW program that were never declared to the OPCW—the historic CWPF near Tonbo. *In accordance with CWC Article III, paragraph 1, each State Party is required to declare whether it owns or possesses chemical weapons and whether it has or had any chemical weapons production facilities under its ownership or possession.* Burma has failed to declare its past program to the OPCW.

BACKGROUND

The United States assesses Burma had a CW program in the 1980s that included a sulfur mustard development program and chemical weapons production at the facility near Tonbo.

Burma was one of the original signatories of the CWC, having signed the Convention on January 14, 1993. The Convention entered into force for Burma on August 7, 2015. Burma made its initial declaration on September 7, 2015. No CW or CWPFs were declared.

Despite ratifying the CWC in 2015, Burma has retained a facility assessed to have housed key components of its historical CW program that were never declared to the OPCW. Infrastructure has remained at several buildings at the Tonbo site. Most of the original buildings associated with Burma's legacy research, production, weaponization, and storage of sulfur mustard munitions remain at the historic CWPF near Tonbo, which was Burma's primary CW research, production, weaponization, and storage center during the 1980s. The physical integrity of the buildings at Tonbo remain intact. Additionally, Burma has failed to declare four dual-use facilities: three urea fertilizer plants and one methanol production plant under the Burmese Ministry of Energy, all of which probably have annual production capacities that meet declaration requirements. The United States is also concerned that Burma did not declare at least one other location that may have been involved in Burma's military-run CW program.

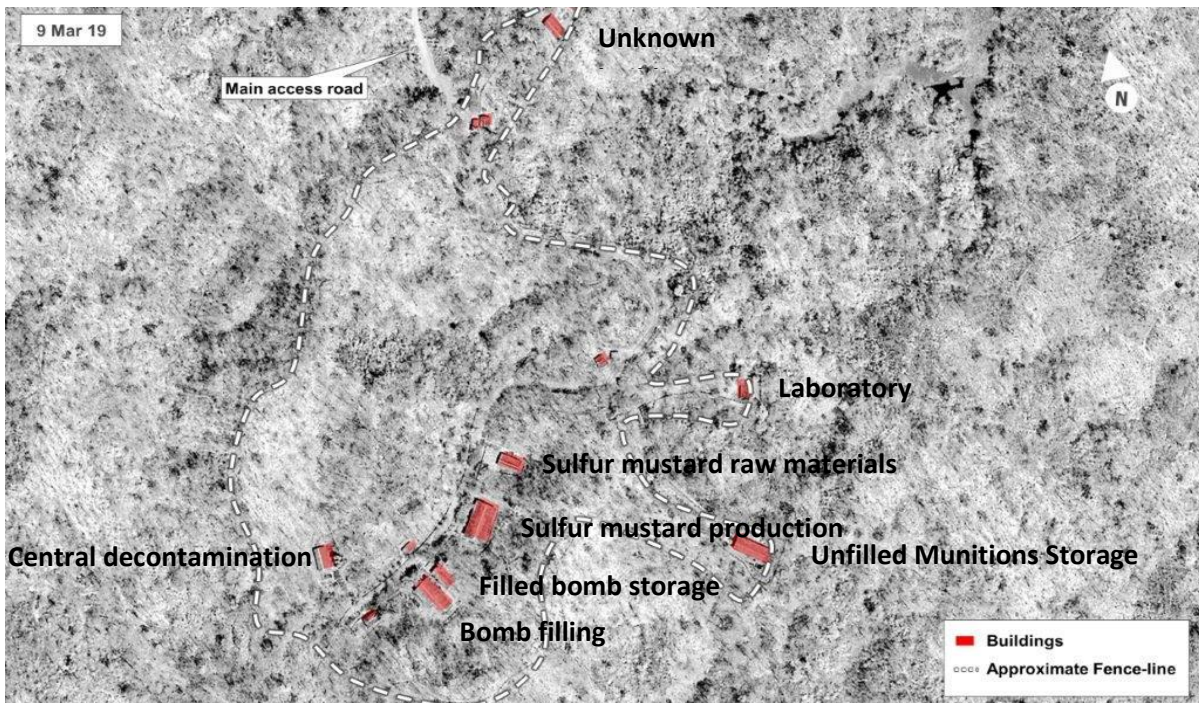


Figure 1 Tonbo CWPF

The United States provided the following historical photographs to Burma during a September 2020 bilateral meeting:



Figure 2 Project 817 Director LTC Khin Muang Lin and Chief of Plans MAJ Nyant Tun at Tonbo



Figure 3 Laboratory entry hall with protective masks

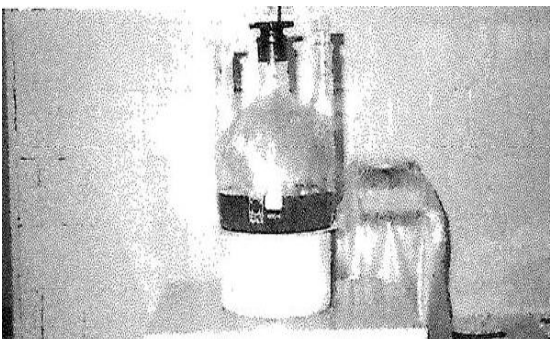


Figure 4 Laboratory scale reaction vessel containing sulfur mustard

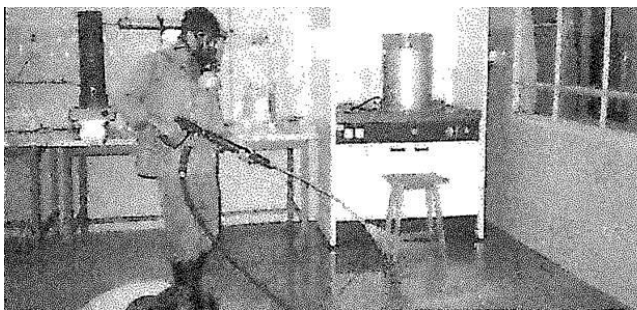


Figure 5 Decontamination of the laboratory work area

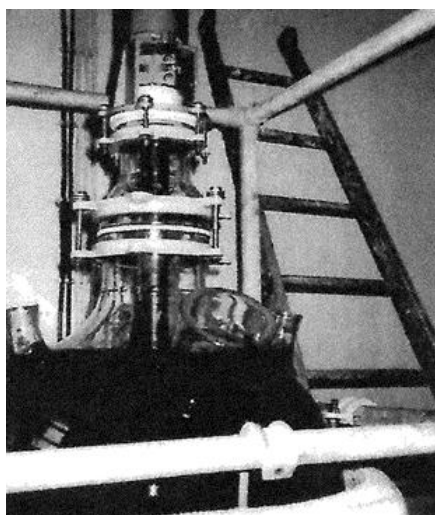


Figure 6 Sulfur monochloride production reactor

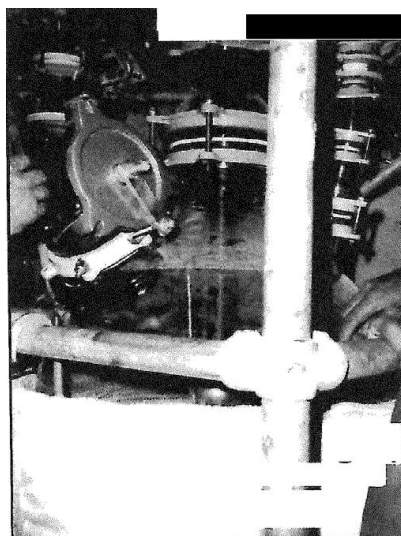


Figure 7 Sulfur mustard production reactor



Figure 8 Ethanol reservoir for ethylene production

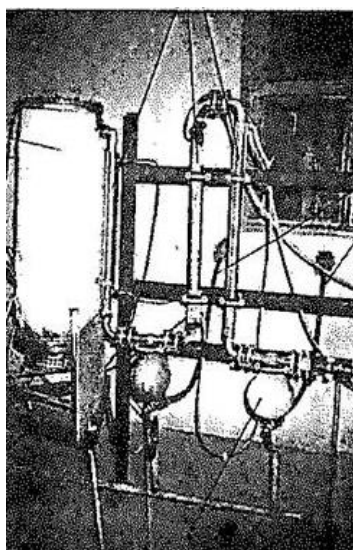


Figure 9 Ethylene drying train

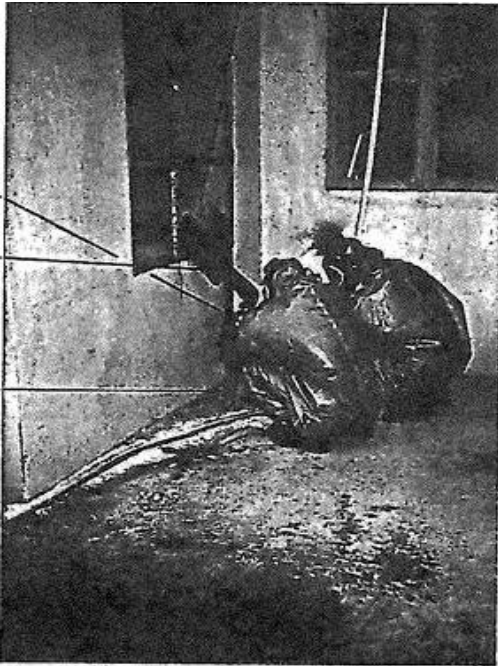


Figure 10 Filling of storage drum with sulfur mustard
from the production area

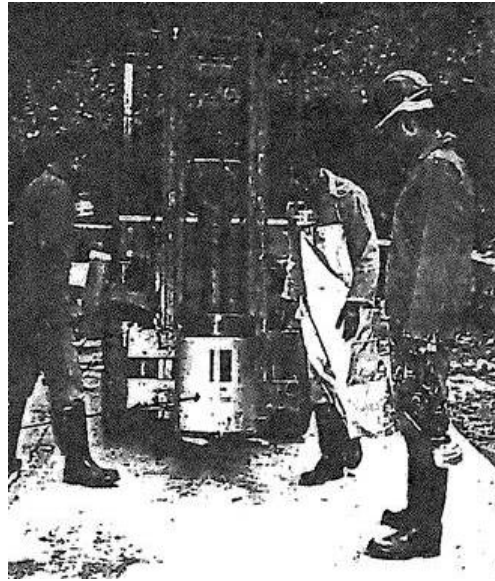


Figure 11 Transfer of sulfur mustard

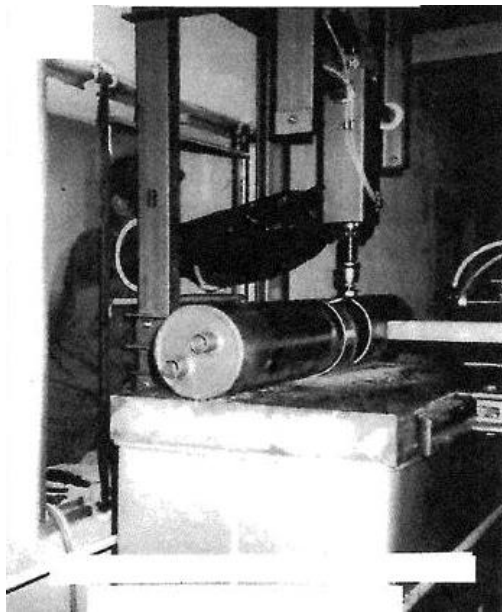


Figure 12 Aerial bomb filling with sulfur mustard

EFFORTS TO RESOLVE COMPLIANCE CONCERNS

(U) Prior to entry into force of the CWC for Burma, Burma was provided assistance and advice regarding its declaration obligations. In February 2013, the OPCW Technical Secretariat held a three-day technical assistance workshop in Naypyidaw at the request of the Burmese

Government regarding national implementation requirements. In January 2015, the United States sent a senior-level delegation to Rangoon to discuss CWC ratification and offered U.S. assistance for CW implementation. In August 2015, the United States again engaged the Government of Burma about its historical CW program at Tonbo. Specifically, on August 4, 2015, the U.S. Ambassador to Burma asked the Commander-in-Chief of the Burmese military about the Burmese historical CW program at Tonbo, including raising the possibility that Burma still had a small CW stockpile. In each case, the United States requested that Burma investigate and declare its past program. Beginning in February 2019, the United States reinvigorated bilateral discussions with the Government of Burma to ensure that the civilian government is aware of U.S. concerns regarding Burma's past CW program. Although the civilian government and its interagency Departments, including the military, had actively engaged in discussions and indicated its commitment to fulfill its CWC obligations, Burma's military did not admit its past CW program. The United States has encouraged regional partners and allies to raise this issue with Burma, but their engagement has been similarly unfruitful. Further, the United States has informed the OPCW Director-General of the U.S. assessment of the Burmese past CW program. Two expert-level bilateral meetings were held with Burma in 2020, one in Naypyidaw in February 2020 and one virtually in September 2020. During the September 22, 2020 virtual meeting, the United States presented additional information about the historical Tonbo CWPF including photos and information about 1980s Tonbo leadership, schematics of the Tonbo laboratory, production and CW filling buildings and information about Burmese internationally sourced CW equipment. The Burmese indicated they would provide the U.S. information to superiors. In November 2020 at CSP-25, Burma's national statement emphasized their efforts to fully implement the CWC, but made no mention of the obligation to declare the Tonbo CWPF. Throughout 2020, the United States continued to encourage Burma to declare its historical CW program and destroy its CWPF and any remaining chemical weapons. Given the current political situation in Burma, engagement has been paused.

CHINA

FINDING

Based on available information, the United States cannot certify that China has met its obligations under the Convention due to concerns regarding China's research of pharmaceutical-based agents (PBAs) and toxins with potential dual-use applications.

ANALYSIS OF COMPLIANCE CONCERNS

CWC obligations include: Article I, paragraph 1.(a), each State Party undertakes never under any circumstances "to develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone." The United States is

concerned about China’s interest in PBAs and toxins because these agents have utility for chemical weapons applications.

BACKGROUND

China signed the CWC on January 13, 1993, ratified the CWC on April 25, 1997, and submitted its initial declarations in 1998.

Scientists at a Chinese military institute have expressed interest in military applications of PBAs and are engaged in research involving the synthesis, characterization, and testing of PBAs with potential dual-use applications. In addition, available information on studies conducted at Chinese military medical institutions indicates that researchers identify, test and characterize diverse families of potent toxins—which raises questions about the intended purposes of the work conducted by the researchers.

Additional information is provided in the higher classification Annex.

EFFORTS TO RESOLVE COMPLIANCE CONCERNS

In 2020, due to COVID-19 travel restrictions, the United States attempted to engage China virtually on issues related to the CWC, however, Chinese officials “postponed” the meeting, citing unspecified “technical reasons.” The United States will continue to monitor and report about China’s activities in relation to its CWC obligations. The United States will also continue to request meetings with China to discuss CWC issues, as annual meetings were held prior to the COVID-19 pandemic from 2017-2019.

ISLAMIC REPUBLIC OF IRAN (IRAN)

FINDING

The United States certifies Iran is in non-compliance with the CWC due to (1) its failure to declare its transfer of CW to Libya during the 1978-1987 Libya-Chad war, (2) its failure to declare its complete holdings of Riot Control Agents (RCAs), and (3) its failure to submit a complete Chemical Weapons Production Facility (CWPF) declaration. Further, the United States has concerns that Iran is pursuing pharmaceutical-based agents (PBAs) for offensive purposes.

ANALYSIS OF COMPLIANCE CONCERNS

In accordance with CWC Article III, paragraph 1(a) (iv), each State Party is required to “declare whether it has transferred or received, directly or indirectly, any chemical weapons since 1 January 1946 and specify the transfer or receipt of such weapons.” The United States

assesses that in 1987 Iran transferred CW munitions to Libya during the 1978-1987 Libya-Chad war. Following the collapse of the Gaddafi regime, the Libyan Transitional National Council located sulfur mustard-filled 130 millimeter (mm) artillery shells and aerial bombs, which are assessed to have originated from Iran in the late 1980s. In 2011, Libya declared to the OPCW that it discovered 517 artillery shells and 8 aerial bombs comprising 1.3 metric tons of sulfur mustard but did not address the provenance of the items. Iran never declared this transfer in accordance with Article III, paragraph 1(a)(iv) of the CWC, and Iran never responded to an OPCW request for additional information.

In accordance with Article III, paragraph 1(e) each State Party is required to declare, with respect to riot control agents (RCAs), the chemical name, structural formula, and Chemical Abstracts Service (CAS) registry number, if assigned, of each chemical it holds for riot control purposes. States Parties are further obligated to update the declaration not later than 30 days after any change becomes effective. We assess that Iran's RCA declaration is incomplete. Iran has developed several RCA options – specifically the irritant dibenzoxazepine (CR) – and since 2012, Iran has marketed them for export for riot control purposes. However, Iran has not declared that it holds CR for riot control purposes.

In accordance with CWC Article III, paragraph 1(c)(i) and (ii), each State Party is required to “[d]eclare whether it has or has had any chemical weapons production facility under its ownership or possession, or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946” and “[s]pecify any chemical weapons production facility it has or has had under its ownership or possession or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946, in accordance with Part V, paragraph 1, of the Verification Annex.” Further, Part V, paragraph (1)(c) of the Verification Annex requires a “statement of whether it is a facility for the manufacture of chemicals that are defined as chemical weapons or whether it is a facility for the filling of chemical weapons, or both.” In light of the discovery of chemical-filled artillery projectiles and aerial bombs the United States assesses that Iran filled and possessed chemical weapons. We also assess that Iran successfully developed mortars, artillery cannon rounds, and aerial bombs for CW agent delivery during the 1980-1987 Iran-Iraq War, but failed to declare a CWPF with respect to weapons filling.

The United States is also concerned that Iran is pursuing chemicals for purposes inconsistent with the CWC, based on Iranian scientific publications. Specifically, Iran's work on PBAs, which it refers to as “incapacitating chemical agents,” raises serious concerns that Iran is pursuing these agents for offensive purposes, which would be a violation of Article I. Iran appears to believe that it can justify its program as consistent with purposes not prohibited under the CWC under Article VI, including for law enforcement purposes. We assess that Iran is likely exploiting these exceptions for purposes inconsistent with the Convention.

BACKGROUND

Iran signed the CWC on January 13, 1993, ratified the CWC on November 3, 1997, and submitted its initial declarations in 1998 and 1999. Previous 10(C) Reports and Compliance reports have addressed Iran's sulfur and nitrogen mustard production before entry into force. Iran did not declare any CW weapons or agent stockpiles.

Lack of Declaration on Transfer of Chemical Weapons to Libya

Iran is assessed to have transferred CW munitions to Libya during the 1978-1987 Libyan-Chad war. Specifically, Iran is assessed to have transferred sulfur mustard-filled chemical weapons to Libya in 1987. After the collapse of the Gaddafi regime in 2011, the Libyan Government located newly found munitions suspected to be of a chemical nature, which are assessed to have originated from Iran in the late 1980s.



Figure 13: Photographs of the 517 130-mm artillery shells declared by Libya. The Persian markings on the cases (inset) translate to 01-G-S-Gh (meaning unknown) and 65-01 (likely a manufacture date of Farvardin 1365, corresponding to March/April 1986).

After declaring the 130mm artillery projectiles in 2011, Libya requested OPCW Technical Secretariat assistance in collecting information relating to these chemical weapons. Pursuant to this request, the Technical Secretariat, on December 19, 2012, invited “States Parties, should they be aware and/or in the possession of any information that could contribute to resolving this issue, or should they need any additional information and/or clarification in this regard, to directly contact the National Authority of Libya, or the Permanent Representation of Libya to the

OPCW” (NV/VER/DEB/180682/12). Iran has never declared that it transferred chemical weapons to Libya, including in response to the Technical Secretariat’s request.

Lack of Complete Declaration on Riot Control Agents

Although Iran has not declared that it holds CR for riot control purposes, the Iranian Ministry of Defense publically advertises a range of RCA delivery devices, including a personal defense spray that contains CR. Additionally, Shahid Meisami Group (SMG) has participated in defense expos providing fact sheets on its products, to include an 'Ashkan' irritant hand grenade that creates smoke containing CR. SMG has also provided fact sheets to interested users on a “Fog Maker System” that can be used to make smoke and fog at high volume in a short time. This is noteworthy because it can disseminate debilitating chemicals, like CR, over a large area quickly.



Figure 14: Protect3000 contains CR Iranian Advertisement for “Fog Maker” Mounted on a Speed Boat and Truck



Figure 15: Defense Industries Organization CS-Filled Hand Grenade and Cartridge

Lack of Complete Declaration on CWPFS

Although Iran never declared a CWPFS weapons filling capability to weaponize its chemical agent, reports of Iranian-filled CW munition use during the Iran-Iraq war indicate otherwise. In

April 1987, mustard-filled 130-mm mortars believed to be of Iranian origin were used near Basrah, Iraq. Iraq's military and a UN delegation in Iraq reported the artillery contained residual sulfur mustard agent and Iraqi casualties displayed burns consistent with mustard exposure.



Figure 16: Image of 81-mm mortars

During an UNSCOM inspection in 1991 at Iraq's Muthana State Establishment, UN inspectors found 165 81-mm mortars filled with sulfur mustard that the Iraqis claimed were Iranian origin (image). Iraq did not possess or fill 81-mm mortars with mustard and the subsequent laboratory tests concluded that the agent in the munitions had higher levels of sulfur mustard impurities than those typically found in agent made by the Iraqis at Muthana, suggesting the munitions were not made by the Iraqis or made at that location.

Exploiting the CWC's Purposes not Prohibited

Since 2005, some of Iran's military controlled facilities, Imam Hossein University (IHU) and Malek Ashtar University (MUT), have researched chemical that have a wide range of sedation, dissociation, and amnestic incapacitating effects. Published Iranian papers cited the potential weapons applications of the PBAs; one specifically referenced the use of fentanyl during the 2002 Dubrovka theater hostage crisis. In 2014, Iran's Chemistry Department of IHU sought kilogram quantities of medetomidine—a sedative it has researched as an incapacitant—from Chinese exporters. The Chemistry Department has little history of veterinary or even medical research and the quantities sought (10,000+ effective doses) were inconsistent with the reported end use of research.

EFFORTS TO RESOLVE COMPLIANCE CONCERNS

On November 22, 2018, the United States addressed Iran's non-compliance with the CWC in its national statement to the CWC's Fourth Review Conference. The statement included findings from the November 20, 2018 Report to Congress detailing Iran's non-compliance with the CWC. The United States reiterated this finding in its 2019 and the 2020 national statements to the CWC.

Conference of the States Parties. In 2019, the G7 also issued a statement of concern about Iranian CWC compliance further reinforcing the U.S. non-compliance finding. In its 2020 national statement to the Conference of the States Parties, the United States specifically called on Iran to take action and made clear that the United States would consider actions, including sanctions, in response to Iran's CWC non-compliance. . . . Following the first session of the 2020 Conference of the States Parties, on December 3, 2020, the United States designated Iranian defense entity Shahid Meisami Group (SGM) under Executive Order 13382 because of its responsibility for projects involving the testing and production of chemical agents for use as so-called incapacitation agents. SMG's director, Mehran Babri, was also designated. The United States is concerned about the regime's true intent with regard to the testing and production of these so-called chemical incapacitating agents, which could be used for offensive purposes, including against Iranian citizens. No bilateral discussions occurred during the 2020 reporting year. The last CWC compliance-related bilateral exchanges occurred in 2001 and 2004, on the margins of OPCW Executive Council meetings, but discussions did not resolve any of the issues raised by the United States.

RUSSIAN FEDERATION (RUSSIA)

FINDING

The United States certifies that Russia is in non-compliance with the CWC for its use of a novichok nerve agent in an assassination attempt on a Russian opposition leader on August 20, 2020. The United States previously certified that Russia was in non-compliance with the CWC for its 2018 use of a novichok nerve agent in an assassination attempt on UK soil. These attacks make clear that Russia retains an undeclared chemical weapons program. The United States cannot certify that Russia has met its obligations for its complete declarations of its: 1) CWPFS; (2) CW development facilities; and (3) CW stockpiles. The United States continues to have concerns regarding Russia's assistance to the Syrian Arab Republic regarding the regime's use of chlorine against Douma in April 2018. Furthermore, the United States has concerns that Russia's pharmaceutical-based agents (PBAs) program is for offensive purposes.

ANALYSIS OF COMPLIANCE CONCERNS

In accordance with Article I, paragraph 1, each State Party undertakes never under any circumstances "to develop, produce, otherwise acquire, stockpile or retain chemical weapons" or "to use chemical weapons." On August 20, 2020, the Russian Federation's Federal Security Service (FSB) officers used a novichok nerve agent to poison a Russian opposition leader, Aleksey Navalny, while he was traveling back to Moscow after campaigning in Tomsk and Novosibirsk, Russia, against pro-Kremlin candidates in regional elections. On March 4, 2018, the Russian Federation attempted to assassinate two individuals on UK soil using a novichok nerve agent. These acts are clear violations of the CWC Article I, paragraph 1 prohibition on the use of chemical weapons.

In accordance with CWC Article I, paragraph 1(d), each State Party undertakes never under any circumstances to assist, encourage, or induce, in any way, anyone to engage in any activity prohibited to a State Party under this convention. There are serious compliance questions about Russian officials' assistance to the Syrian Arab Republic regarding the Syrian regime's chemical attack against its own citizens in the city of Douma on April 7, 2018. Russia's joint air operations and negotiations to retake eastern Ghouta from opposition forces and its activities assisting the Syrian Arab Republic to cover up of the use of CW after the attack raise serious questions about Russia's possible role assisting the Syrian regime's use of chemical weapons on April 7, 2018.

In accordance with Article I, paragraph 2, each State Party "undertakes to destroy chemical weapons it owns or possesses." Each State Party is also required to declare its chemical weapons program in accordance with Article III. Russia completed destruction of its declared Category 1 chemical weapon stockpiles on September 27, 2017. Based on existing information, however, the United States does not believe Russia has declared all of its CW stockpile, all CWPFs, and CW development facilities. In light of the March 4, 2018 assassination attempt in the UK and its August 20, 2020 assassination attempt on Russian territory, it is clear that Russia has not made a complete declaration of its chemical weapons program.

The United States is also concerned that Russia has a pharmaceutical-based agent (PBA) program intended for purposes inconsistent with the CWC. Russian Health Minister Shevchenko acknowledged to the press that Russian special operations employed "derivatives of fentanyl" to resolve the October 2002 Dubrovka theater hostage crisis. The United States is concerned that Russia is pursuing these types of agents for offensive purposes, which would be a violation of Article I. According to a non-paper Russia published at the OPCW in November 2018, entitled, *Aerosolisation of Central Nervous System-Acting Chemicals For Law Enforcement Purposes*, Russia believes use of these agents "is not regulated under the [Chemical Weapons] Convention." The United States assesses that Russia is likely exploiting the CWC Article VI provision of purposes not prohibited, which includes law enforcement, for purposes inconsistent with the Convention.

BACKGROUND

The Convention entered into force for Russia on December 5, 1997, and Russia made its initial declaration in March 1998, in accordance with the CWC. The Russian declaration included CWPFs, chemical weapons storage facilities (CWSFs), a chemical weapons development facility, and a stockpile of almost 40,000 metric tons of CW agent, in both bulk and weaponized form. As of September 27, 2017, Russia had completed destruction of its declared Category 1 CW stockpile. Its Article VI declaration included Schedule 2, Schedule 3, and other chemical production facility plant sites.

Use of Chemical Weapons

With respect to the poisoning of Alexsey Navalny, analysis from several national laboratories, including laboratories in Germany, France, Sweden, and other laboratories that are designated by the Organization for the Prohibition of Chemical Weapons (OPCW), concluded Navalny was poisoned with a nerve agent from a group of chemical agents, novichoks, that the United States assesses only Russia has researched, developed, and used as chemical weapons. In addition, the FSB was tracking and surveilling Navalny during his stay in Tomsk, Russia. Navalny has for many years been the target of FSB surveillance, including wiretapping and covert video surveillance. Russia, however, has denied any responsibility for the attack.

Russia has also denied any responsibility for the assassination attempt against UK citizen Sergei Skripal and his daughter Yulia Skripal, despite the evidence that Russia is responsible, including UK identification and video of agents from Russia's General Staff Main Intelligence Directorate. The Soviet Union developed this toxic chemical in the 1970s and 1980s as part of its development of a new class of "fourth-generation" nerve agents. It is highly likely these agents were developed to prevent detection by the West and circumvent international chemical weapons controls.

The OPCW Technical Secretariat confirmed, as part of two separate Technical Assistance Visits that the chemical agent used to poison the Skripals was an unscheduled toxic agent, and that it matched the UK analysis. The OPCW Technical Secretariat also confirmed as part of a Technical Assistance Visit to Germany in September 2020 the analytical findings of German, French, and Swedish laboratories that determined Navalny was exposed to an unscheduled nerve agent from the Novichok group. Specifically, the unclassified TAV summary stated that the chemical used had "structural characteristics similar to the toxic chemicals belonging to Schedules 1.A.14 and 1.A.15, which were added to the Annex on Chemicals at the Twenty-Fourth Session of the Conference of the States Parties in November 2019. This cholinesterase inhibitor is not listed in the Annex on Chemicals to the Convention."

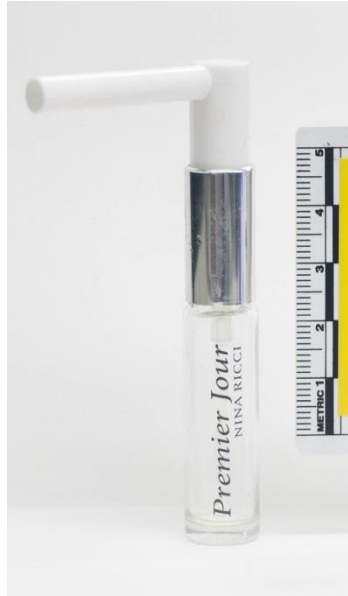


Figure 17: A UK citizen found this perfume bottle in Amesbury, UK, which contained the chemical agent used to poison the Skripals in Salisbury, UK. The UK citizens were both exposed to the chemical agent, and one died as a result of her exposure.

Assistance to the Syrian Arab Regime

Russian Federation assistance to the Syrian regime may have facilitated and enabled the regime's continued use of chemical weapons. Beginning in September 2015 until present, the Russian Government has been directly involved in the Syrian civil war, assisting the Syrian regime to execute its military offensive by providing Russian airpower and other material support to the regime. This has included support in several siege and starve offensives including in Aleppo and the Damascus suburbs. On February 18, 2018, the Syrian regime and Russia began an assault on the de-escalation zone of eastern Ghouta. On February 24, 2018 the UN Security Council unanimously approved a thirty day cease fire in Syria (Resolution 2401 (2018)), however Syrian Government forces started a ground assault the very next day. Fighting continued, and between February 24 and 28, 2018 Russian military aircraft conducted at least 20 daily bombing missions in Damascus and Eastern Ghouta from Humaymim Airfield in northwest Syria, directly contravening the UN Security Council resolution to which it agreed. The Syrian regime and Russian military aircraft bombed towns into submission and, while doing so, offered negotiations and evacuations if opposition forces surrendered. The first deal negotiated by Russia for the Syrian regime was reached on March 18, 2018 with Ahrar al-Sham. A second deal was reached with additional Ghouta suburbs on March 23, 2018.

Douma then became the last town in Eastern Ghouta under opposition control. On April 4, 2018 there was ongoing negotiation between the Syrian regime, the Russian government, and opposition forces inside Douma, reported by the UN humanitarian adviser for Syria. On April 4, Russian Lieutenant General Sergei Rudskoi is quoted by Al Jazeera News as stating: "The militants are being evacuated from Douma, their last bastion in Eastern Ghouta, and within a few

days the humanitarian operation in Eastern Ghouta must be completed.” On April 5, however, Syrian state media and opposition forces are cited stating that evacuations from Douma were suspended.

On April 6, 2018, the Syrian regime launched an air and ground offensive against Douma. The United States assesses with confidence that on April 7, 2018, the Syrian regime used chemical weapons in the eastern Damascus suburb of Douma, killing dozens of men, women, and children and severely injuring hundreds more. On April 8, 2018, Syrian state media reported that the Syrian regime agreed to a final deal negotiated by the Russian military with Jaish al-Islam to depart Douma within 48 hours and to bring the Russian military police into the city. The March 1, 2019, Report of the OPCW Fact Finding Mission regarding the use of toxic chemicals as a weapon in Douma, Syria on April 7, 2018 (FFM), corroborated the presence of Russian military police in Douma. On page 7, paragraph 6.2 of its report, the FFM explained that although as a general rule the security of its missions is the responsibility of the hosting State Party to the CWC, the FFM team “was informed by Syrian and Russian representatives that the Syrian Arab Republic could guarantee the safety of the FFM team only if security was provided jointly with the Russian Military Police.”

Thereafter, the Russian and Syrian regime:

- Denied and delayed OPCW inspectors’ access to Douma, in an effort to conduct their own staged investigations;
- Attempted to sanitize the locations of suspected attacks and remove any incriminating evidence of chemical weapons use;
- Staged photographs for dissemination online to help support the Russian/Syrian conflicting narratives that the opposition was responsible for the chemical weapon attacks or, alternatively, that there was no use of chemical weapons; and
- Threatened and coerced the Syrian opposition in Douma: any first hand testimony that Russian or Syrian outlets or spokespeople cite from opposition figures or doctors in Douma is assessed to have been taken under duress and extreme pressure from the Syrian and Russian military.

Moreover, Russia continued supporting Syria by denying discussion of Syrian CW use in international fora in 2020, including at the United Nations and at the OPCW.

Incomplete Chemical Weapons Declaration

The United States believes the Russian CW declaration is not complete. In particular, the United States believes that Russia’s CWC declaration is incomplete with respect to its chemical agent and weapons stockpiles. The United States notes that there are additional facilities that Russia may have been required to declare as CWPfFs. Lastly, the United States does not share Russia’s narrow interpretation of the CWC that the criterion in Article III is “primarily for” the

development of CW and instead believes that all CW development facilities, including CW testing facilities, need to be declared.

EFFORTS TO RESOLVE COMPLIANCE CONCERNS

The United States has had longstanding concerns about Russian compliance with the CWC. The United States engaged in numerous exchanges with Russia regarding a number of compliance issues in 2002, 2003, and 2006, during which the United States discussed its concerns with the accuracy of Russia's CWC declaration. In 2006, the United States reiterated its longstanding proposal to hold expert-level consultations but no consultations were held. In 2017, the United States consulted with select like-minded CWC States Parties on our shared concerns regarding Russia's compliance with the CWC.

In 2018, the United States undertook significant effort in the reporting period to address its concerns with Russian non-compliance with the CWC. In response to the March 2018 Russian use of a novichok nerve agent in an attempt to assassinate the Skripals, the United States, along with the UK, called on the Russians Government to declare its Novichok nerve agent program to the OPCW. In March 2018, President Trump ordered the expulsion of 60 Russian intelligence officers from the United States and ordered the closure of the Russian consulate in Seattle. This action was taken in coordination with U.S. allies and partners around the world.

The United States imposed two rounds of sanctions on Russia pursuant to the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (CBW Act) in August 2018 and August 2019. The sanctions will remain in place until Russia (1) is no longer using CBW in violation of international law, (2) has provided reliable assurances it will not engage in any such activities in the future, and (3) is willing to allow on-site inspection to ensure it is not using CBW in violation of international law. To date, Russia has not met those conditions. The Department of Commerce also added two Russian military institutes associated with the CW program to its Entity List in August 2020.

The United States also responded to the March 2018 assassination attempt in the UK by taking action at the OPCW to ensure that the CWC specifically and concretely addresses novichoks. On October 16, 2018, the United States, Canada, and the Netherlands jointly submitted to the OPCW Director General a TCP to add two families of chemicals to the CWC Annex on Chemicals. The two chemical families include the chemical family of the novichok military grade nerve agent involved in the UK assassination attempt, as well as a closely related family of chemicals.

On January 14, 2019, the EC adopted a decision by consensus recommending to States Parties that the two families be added to the Annex on Chemicals. Russia later objected to the EC's recommendation, and the proposal went to the CSP for decision. The TCP was subsequently adopted by consensus by the CSP in November 2019, and entered into force in June 2020.

In 2020, the United States continued to consult with like-minded CWC States Parties on our shared concerns regarding Russia's non-compliance with the CWC. In November 2020, in response to the poisoning of Alexei Navalny, the United States, along with 57 co-sponsors issued a joint statement condemning the assassination attempt against Navalny.

SYRIAN ARAB REPUBLIC (SYRIA)

FINDING

The United States certifies that the Syrian Arab Republic is in non-compliance with its obligations under the CWC. The United States assesses that Syria has used chemical weapons repeatedly against the Syrian people since acceding to the Convention in 2013, in violation of its obligations under Article I of the CWC. In addition, the United States assesses that Syria did not declare all elements of its CW program, as required by Article III of the CWC, and that Syria retains chemical weapons as defined by the CWC. The process for verifying the accuracy and completeness of the Syrian declaration and the resolution of these matters is ongoing.

ANALYSIS OF COMPLIANCE CONCERNS

In accordance with CWC Article I, paragraph 1(b) each State Party is obligated never under any circumstances to use CW. The United States assessed that the Syrian regime repeatedly used chlorine and sarin as chemical weapons from 2014 through 2019 in violation of Article I of the CWC. Further, Syria violated UN Security Council Resolution (UNSCR) 2118 operative paragraph 4, which provides that "the Syrian Arab Republic shall not use, develop, produce, otherwise acquire, stockpile or retain chemical weapons." In spite of compelling evidence, which included findings of attribution by two independent international mechanisms, Syria continued to deny it used CW.

In accordance with CWC Article III, paragraph 1 each State Party is obligated to declare its CW program. The Syrian declaration contained obvious gaps, discrepancies, and omissions, in violation of Article III of the CWC and the additional declaration requirements outlined in operative paragraph 6 of UNSCR 2118. Although the OPCW Declaration Assessment Team (DAT) effort compelled Syria to declare additional activities and several additional sites since it started its work in 2014, significant gaps, discrepancies, and omissions in the declaration remain. These declaration issues, Syria's use of CW independently confirmed by both the OPCW-UN Joint Investigative Mechanism (JIM) and the OPCW Investigation and Identification Team (IIT) and the many more instances of CW use that the United States assesses can be attributed to the Syrian regime demonstrate that the Syrian regime has retained a residual CW capability and has not disclosed the full history and scope of its CW-related activities.

BACKGROUND

In 2013, following the threat of military force in response to the use of sarin in multiple, small-scale attacks in opposition areas, and in a large-scale attack using surface-to-surface rockets in the Damascus suburb of Ghouta in August, Syria deposited its instruments of accession to the CWC on September 14, 2013. The United States and Russia negotiated the Framework for Elimination of the Syrian CW Program. This Framework led to the September 27, 2013 OPCW EC decision and to UNSCR 2118, which, taken together, established milestones for the full disclosure and elimination of Syria's CW program and stringent verification, including unfettered access for the OPCW to Syrian sites and individuals. Detailed background information on CW use in previous years may be found in the 2014 – 2020 Reports.

Continued Concerns about Syria's CWC Declaration

After a preliminary disclosure of its CW program, Syria submitted to the OPCW its treaty-mandated initial declaration in October 2013, followed by numerous subsequent amendments. The sum of Syria's disclosures, declarations and amendments provided an incomplete declaration of Syria's CW program. The OPCW Technical Secretariat identified gaps, discrepancies, and omissions in the declaration raising serious concerns about whether Syria had declared its entire CW program. In April 2014, the OPCW Director-General established a Declaration Assessment Team (DAT) to attempt to clarify these concerns. The DAT has not been successful in resolving all declaration issues, but will continue its work into 2021.

The twenty-third round of consultations between the DAT and the Syrian National Authority took place from September 22 to October 3, 2020 in Damascus; however, 19 issues remain despite the DAT's continued efforts that led to three issues related to Syria's declaration being closed during the latest consultations. From November 8-13, 2020, the TS conducted its seventh inspection mission to two Scientific Studies and Research Centre (SSRC) sites, Barzah and SSRC Jamarayah, in accordance with EC decision EC-83/DEC.5. The TS has yet to report on the results of recent inspections. On November 24, 2020, the DG informed States Parties that Syrian had yet to provide sufficient technical information or explanations for a Schedule 2.B.04 chemical that was detected in samples taken during the DAT's third round of inspections in November 2018. Two designated laboratories noted that the chemical detected "could be the hydrolysis product of a Schedule 1.A.01 or 1.A.03 chemical."^b Similar to challenges faced in previous years, the TS's work in 2020 was hampered by lack of access to original documentation on Syria's CW program, as well as lack of access to and engagement with senior Syrian leadership within the CW program.

The OPCW TS has repeatedly encouraged Syria to provide the information necessary to resolve outstanding issues. On April 21, 2020, the OPCW Director-General sent a letter to Syrian

^b These categories of Schedule 1 chemicals cover agents and analogues in the sarin and VX classes, respectively.

Deputy Foreign Minister, Dr. Faisal Mekdad requesting further information on outstanding issues discussed in the course of 2019 consultations including in regard to the SSRC. Syria answered on August 25, 2020 and provided pertinent information on eight different issues. However, the DG continued to note that the TS cannot fully verify that the SAR declaration can be considered either accurate or complete. Thus the numerous, serious concerns over the Syrian declaration will likely remain open for the foreseeable future.

Repeated Use of Chemical Weapons

The United States estimates – conservatively – that the Syrian regime has used chemical weapons at least 50 times since the Syrian conflict began.

During the reporting period the FFM issued two reports on the alleged use of toxic chemicals as a weapon in relation to attacks that took place in Aleppo on November 24, 2018 and in Saraqib on August 1, 2016. In both cases, the FFM's analysis of all available data obtained up until the issuance of their report did not allow it to establish whether chemicals were used as a weapon.

The FFM is investigating at least five further instances of alleged use of CW: Kharbit Masasnah on July 7, 2017 and on August 4, 2017; al Salmiyah on August 9, 2017; Damascus on October 22, 2017; and al Balil Souran on November 8, 2017, for which reports remain outstanding.

Following reports of the OPCW-UN Joint Investigative Mechanism (JIM) that attributed four cases of CW use to elements of the Syrian Government, and two instances of use of sulfur mustard to ISIL, Russia repeatedly utilized its veto in the UN Security Council to prevent the extension of the JIM's mandate beyond November 2017.

In response to repeated incidents of chemical weapons use around the world, the United States and like-minded nations called for convening a Special Session of the OPCW CSP during June 2018. At that special session, the CSP adopted a decision directing the TS to establish attribution arrangements to identify the perpetrators of CW attacks for instances where the FFM concluded there was use or likely use of CW in Syria and for which the OPCW-UN Joint Investigative Mechanism has not issued a report (CSP-SS-4/DEC.3, dated 30 June 2018).

In accordance with the June 2018 decision of the special session of the CSP, the OPCW established the IIT to identify the perpetrators of chemical weapons attacks in Syria. The IIT previously notified States Parties that it intends to first review the following cases (listed in chronological order of occurrence):

1. Al-Tamanah, April, 12, 2014
2. Kafr-Zita, April 18, 2014
3. Al-Tamanah, April 18, 2014
4. Marea, September 1, 2015
5. Ltamenah, March 24, 2017

6. Ltamenah, March 25, 2017
7. Ltamenah, March 30, 2017
8. Saraqib, February 4, 2018
9. Douma, April 7, 2018

On April 8, 2020 the IIT issued its inaugural report covering the three March 2017 chemical weapons attacks in Ltamenah. The IIT found reasonable ground to believe that:

- At approximately 6:00 on 24 March 2017, a Su-22 military airplane belonging to the 50th Brigade of the 22nd Air Division of the Syrian Arab Air Force, departing from Shayrat airbase, dropped an M4000 aerial bomb containing sarin in southern Ltamenah, affecting at least 16 persons.
- At approximately 15:00 on 25 March 2017, a helicopter of the Syrian Arab Air Force, departing from Hama airbase, dropped a cylinder on the Ltamenah hospital; the cylinder broke into the hospital through its roof, ruptured, and released chlorine, affecting at least 30 persons.
- At approximately 6:00 on 30 March 2017, a Su-22 military airplane belonging to the 50th Brigade of the 22nd Air Division of the Syrian Arab Air Force, departing from Shayrat airbase, dropped an M4000 aerial bomb containing sarin in southern Ltamenah, affecting at least 60 persons.

The IIT also found that the sarin used in Ltamenah on March 24 and 30, 2017 was produced through a chemical process using raw materials consistent with sarin found in the Syrian declared stockpile and that this type of sarin is not known to have been developed and manufactured by any other States or entities other than the SAR. The IIT further concluded that the attacks “would only have taken place on the basis of orders from the higher authority of the SAR military command.”

Delayed Destruction of Syria’s Chemical Weapons Program

Syria did not complete the destruction of all of its 27 declared CWPFs by the destruction timelines submitted in March 2014. The two remaining facilities were verified as destroyed in June 2018 by the TS.

In November 2020, the TS conducted its final visit to four sealed destroyed CWPFs equipped for remote surveillance by the TS and observed the scheduled removal of the remote monitoring equipment. The TS informed the SAR that the underground structures should remain sealed as part of the destruction plan agreed by the EC.

EFFORTS TO RESOLVE COMPLIANCE CONCERNS

Following the release of the first IIT report, the United States worked with a cross-regional group of responsible States Parties to put forth an OPCW EC decision, which was adopted in July 2020, condemning Syria for its use of chemical weapons in Ltamenah. The decision set out clear measures for the Syrian government to take to redress the situations and, if those measures were not completed by October 7, the EC decided it would recommend that the CSP take appropriate action. Following the October 14 Director-General report that Syria had taken no actions to fulfill the measures set forth in the July EC decision, the United States and 47 like-minded countries submitted a CSP decision for consideration at the next meeting of the CSP that would suspend Syria's rights and privileges under the CWC until it fulfills the measures set forth in the July EC decision. The decision will be taken up in April 2021 when the CSP resumes. (Due to COVID restrictions in the Netherlands and the health and safety of all delegations, CSP-25 convened in November 2020 only to address the OPCW budget and all other agenda items were deferred to the resumption of the CSP in April 2021.)

The United States continues to seize every available opportunity to bring attention to Syria's non-compliance with the CWC. We, for example, highlight it at the UN Security Council meeting addressing Syria. At the OPCW, we also use our statements before the EC and the CSP, to underscore demands for Syria to 1) cease using CW, 2) cooperate with the FFM, 3) change its approach, as recommended by the Director-General, 4) cooperate with the IIT, and 5) resolve the gaps, discrepancies, and omissions in its declaration. As noted above, Syria continued to deny all accusations and attributions of CW use, and claimed that it had cooperated with the OPCW's efforts.

The United States played a key role in securing the adoption of the June 2018 CSP decision that directed the OPCW to establish attribution arrangements to identify the perpetrators of CW attacks in Syria, and the subsequent CSP budget decisions in November 2018, November 2019 and December 2020 that ensure the TS obtains the necessary resources for its work, including that of the IIT. The adoption of the OPCW CSP budget decisions with increasing margins has further highlighted the isolation of Russia and others who seek to shield Syria from accountability for CW use. The United States will continue to seek accountability at the OPCW in 2021.