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REPORT OF THE OPCW FACT-FINDING MISSION IN SYRIA REGARDING AN ALLEGED INCIDENT IN SARAQIB, SYRIAN ARAB REPUBLIC ON 4 FEBRUARY 2018

1. SUMMARY

1.1 On the morning of 5 February 2018, the OPCW Fact-Finding Mission (FFM) became aware of allegations of use of a toxic chemical as a weapon in Saraqib, Idlib Governorate. The FFM assessed the credibility of the allegations based on information collected from open sources and information received from several non-governmental organisations (NGOs).

1.2 The FFM interviewed a variety of witnesses including casualties, health workers, and first responders. The team also received environmental samples, which had been collected from the incident location.

1.3 The conclusions of the FFM were derived from the analysis of interviews, supporting material submitted during the interview process, analysis of environmental samples, and subsequent cross-referencing and corroboration of evidence.

1.4 The FFM determined that chlorine, released from cylinders through mechanical impact, was likely used as a chemical weapon on 4 February 2018 in the Al Talil neighbourhood of Saraqib. This conclusion is based on:

(a) the presence of two cylinders, which were determined by the FFM as previously containing chlorine;

(b) the testimony of witnesses, who identified the cylinders as impacting the location on 4 February 2018;

(c) environmental analyses, demonstrating the unusual presence of chlorine in the local environment; and

(d) a number of patients who presented for treatment at medical facilities shortly after the incident, and showed signs and symptoms of irritation of tissue, which were consistent with exposure to chlorine and other toxic chemicals.

1.5 The FFM also noted the presence of chemicals that can neither be explained as occurring naturally in the environment nor as being related to chlorine. Furthermore, some of the medical signs and symptoms reported were different to those that would be expected from exposure to pure chlorine. There was insufficient information and evidence to enable the FFM to draw any further conclusions on these chemicals at this stage.

2. LEGAL FRAMEWORK

2.1 The FFM was set up in May 2014 "to establish facts surrounding allegations of the use of toxic chemicals, reportedly chorine, for hostile purposes in the Syrian Arab Republic" on the basis of the Director-General's authority under the Chemical Weapons Convention (hereinafter "the Convention") to seek to uphold at all times the object and purpose of the Convention, as reinforced by the relevant decisions of the OPCW Executive Council (hereinafter "the Council").

2.2 The terms of reference of the FFM were mutually agreed upon by the OPCW and the Syrian Arab Republic through the exchange of letters between the OPCW Director-General and the Government of the Syrian Arab Republic, dated 1 and 10 May 2014, respectively (Annex to the Note by the Technical Secretariat S/1255/2015*, dated 10 March 2015).

2.3 The continuation of the FFM was subsequently endorsed by the Council in decision EC-M-48/DEC.1, dated 4 February 2015, as recalled by United Nations Security Council resolution 2209 (2015), and subsequently decision EC-M-50/DEC.1, dated 23 November 2015. Both of these Council decisions and resolution 2209 (2015) require the FFM to study all available information relating to allegations of the use of chemical weapons in the Syrian Arab Republic, including that provided by the Syrian Arab Republic and by others.

3. METHODOLOGY

3.1 The FFM followed the same methodology that had been used in previous missions. This methodology has been comprehensively described in previous reports and therefore will not be repeated in detail here.

3.2 While the overarching methodology has been consistently applied in establishing facts related to the use of chemicals as weapons in Syria, there is a unique set of circumstances presented by each allegation. These circumstances include access to physical evidence, electronic evidence, witnesses, and documentation, in addition to evaluating the time lag between the allegation and such access. As such, the differing circumstances of each allegation assign lesser or greater relevance to the various components of the detailed methodology.

3.3 In particular, the evidentiary value of samples taken close to the time of the allegation, supported by photographic and video evidence and in association with witness testimony, was balanced against the evidentiary value of the FFM visiting the site some time later to collect its own samples.

3.4 Accordingly, the FFM reviewed and compared the methodology applied in reports S/1318/2015.Rev.1 (dated 17 December 2015) and Add.1 (dated 29 February 2016), S/1319/2015 and S/1320/2015 (both dated 29 October 2015), S/1444/2016 (dated

21 December 2016), S/1491/2017 (dated 1 May 2017), S/1510/2017 (dated 29 June 2017) and S/1548/2017 (dated 2 November 2017) to ensure that, with respect to previous allegations, there was a consistent application of the investigative approach.

3.5 The FFM looked at the combination, consistency, and corroboration of the information gathered as a whole in order to reach its conclusions.

3.6 Reference documentation is listed in Annex 1 to this report.

4. DEPLOYMENT DETAILS AND CHRONOLOGY

Pre-deployment

4.1 Based on information gathered from open-source media, the Information Cell alerted the Office of the Director-General of the alleged use of chlorine in an eastern neighbourhood of the city of Saraqib on 4 February 2018.

4.2 The FFM obtained further information from NGOs and by carrying out an expanded search of open sources. Open-source information is listed in Annex 2 to this report. Subsequently, the FFM expanded its search for potential interviewees and evidence in regard to this allegation.

4.3 The FFM noted that during an investigation, complete, direct, and immediate access to the site of an allegation provides the greatest opportunity to collect information. As with all the allegations and incidents referenced in previous reports of the FFM (see paragraph 3.4 above), various constraints, mainly related to security, have not enabled immediate access to sites by the FFM.

4.4 Given that those constraints prevented a team deployment to the location of the alleged incident, the FFM determined that the principal methods for collecting and evaluating the credibility of information include the following: examination of existing reports; assessment and corroboration of background information; conduct of interviews with relevant medical care providers, alleged casualties, and other individuals linked to the reported incident; review of documentation and records provided by interviewees; analysis of the signs and symptoms of victims as reported by interviewees; and receipt of environmental samples, for subsequent analysis.

4.5 The FFM team identified relevant witnesses through open-source research and medical records provided to the team. Access to witnesses was coordinated with NGOs.

4.6 Through liaison with representatives of several NGOs, including Same Justice/Chemical Violations Documentation Center of Syria (CVDCS), the Syrian Civil Defence - also known as White Helmets - (SCD) and the Syrian American Medical Society (SAMS), the FFM contacted witnesses and confirmed their willingness to provide testimony and potential evidence. Furthermore, the FFM coordinated with the NGOs to organise movement of the witnesses.

4.7 The evidentiary value of samples taken close to the time of the allegation, supported by photographic and video evidence and in association with witness testimony, was balanced against the evidentiary value of the FFM visiting the site, if accessible sometime later, to collect its own samples.

Deployment activities

4.8 The FFM held its first interview with respect to allegation in Saraqib on 14 February 2018. Interviews continued until 4 March 2018.

4.9 Environmental samples relating to the allegation of 4 February 2018 were collected by an NGO on 5 February 2018 and were received by the FFM team on 19 February 2018. The samples were prepared for transport and delivered to the OPCW Laboratory on 27 February 2018.

4.10 Information related to the samples is contained in Section 5 below and in Annex 3 to this report. At the time of handover, the NGO that delivered the samples to the FFM confirmed that it had collected those samples. Representatives of the NGO who were involved in the sample collection process were also interviewed. They provided photographs and videos from the site of the allegation, including the sampling process itself.

4.11 From the moment of their receipt by the team, all samples were handled in accordance with applicable OPCW procedures, including the application of seals by the FFM team. The samples were analysed by two OPCW designated laboratories, and the results are presented in Section 5 below.

5. INCIDENT SUMMARY AND ANALYSIS

5.1 The narratives below are derived solely from interviews and, where possible, corroborated with different interviewees and evidence gathered by the team.

5.2 Owing to concerns raised by some of the witnesses, the facility that provided medical treatment is, for reporting purposes herein, generically referred to as the “medical facility” (MF).

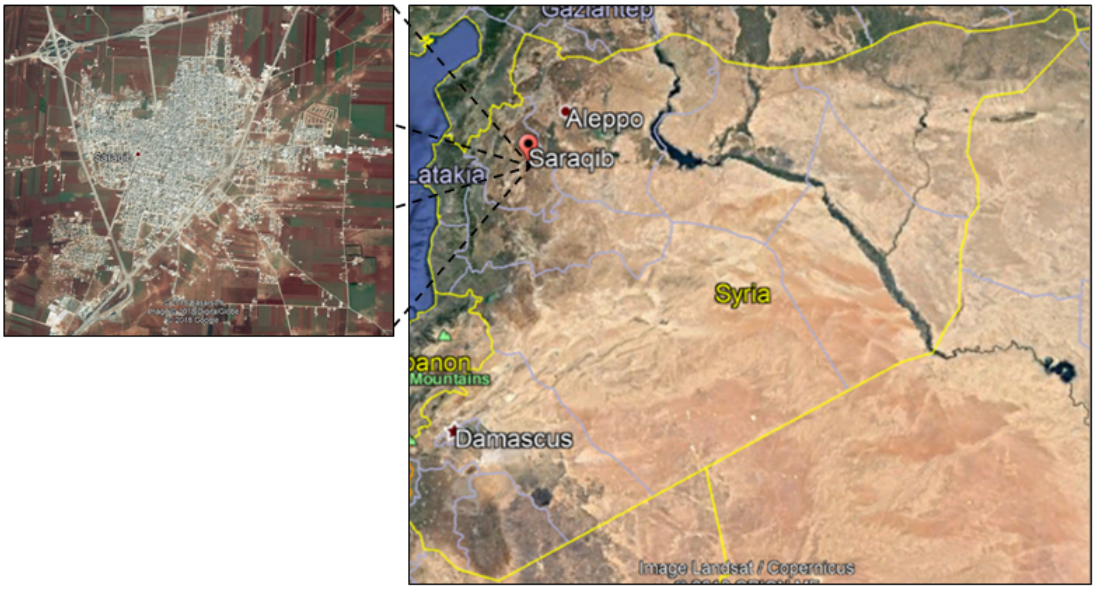
Saraqib

5.3 Saraqib is a city in the Idlib Governorate of the Syrian Arab Republic. It is located approximately 20 km south-east of Idlib and 50 km south-west of Aleppo on the Damascus–Aleppo highway (M5). Prior to the conflict (based on figures from the 2004 census), the population of the city and the surrounding district was approximately 34,000 people.

5.4 In February 2018, at the time of the allegation, the city was not under government control.

5.5 Figure 1 below shows the location of Saraqib.

FIGURE 1: LOCATION OF SARAQIB IN SYRIA



5.6 The meteorological conditions on 4 February 2018 around the time of the alleged incident, as registered in open sources (worldweatheronline.com), are indicated in Table 1 below. The description of weather conditions by witnesses is consistent with data recorded by several meteorological websites. The air movement in the field is likely to have been affected by the shape of the depression and by building structures surrounding the open field.

TABLE 1: METEOROLOGICAL CONDITIONS IN SARAQIB ON 4 FEBRUARY 2018

Time	Temperature	Wind Direction	Wind Speed	Precipitation	Clouds	Humidity
21:00	15°C	From SE	4 km/h	0.0 mm	80%	54 %

5.7 Between 14 February and 4 March 2018, the FFM interviewed 19 people in person, including doctors, patients and first responders. Two of the interviewees were involved in the environmental sample collection process. All interviewees were male.

TABLE 2: DETAILS OF INTERVIEWEES

	Interviewee	Male	Female	Primary Casualty	Secondary Casualty
Treating physicians	2	2	0	0	0
Medical support staff	4	4	0	0	0
Witness	11	11	0	11	0
Sampler	2	2	0	0	0
Total	**19**	**19**	**0**	**11**	**0**

4 February 2018 – Narrative

5.8 Witnesses described the night of 4 February 2018 as cold with no precipitation and virtually no wind. There was poor visibility due to low ambient light, and restricted use of artificial light due to fear of being targeted by aircraft.

5.9 At approximately 21:00, eight men were taking shelter in a basement in the eastern neighbourhood of Al Talil in the city of Saraqib when they heard a notification via radio from a spotter that a helicopter had entered the airspace of Saraqib from the south-east. At approximately 21:15, witnesses reported hearing a helicopter flying above the city and the sound of two "barrels" falling and impacting in close proximity to their location. They also indicated not hearing any explosion.

5.10 According to witness statements, two cylinders (or "barrels" according to most witnesses) fell in an open field surrounded by building structures approximately 200 metres to the south-west of the Agricultural Bank in the eastern part of Saraqib (see Figure 3 below), and 50 to 100 metres to the south-west of the basement mentioned in paragraph 5.9 above.

5.11 Both impact points were in this open field approximately 200 x 200 metres in size, which is in a depression 3 to 4 metres lower than the surrounding urbanised area. The impact locations, as given by witnesses, are shown in Figure 3 below. The initiation points were within a short distance and short time frame from one another. The FFM was unable to determine the chronological order of impact of the two cylinders; as such, they are numbered Impact Point 1 and Impact Point 2 for referencing purposes only.

5.12 Figures 2, 3, and 4 below show the location of the alleged incident in Saraqib, the impact points, and the basement where the eight men had taken shelter. The impact points were identified based on the analysis of the information gathered by the FFM from different sources, including witnesses.

FIGURE 2: SARAQIB AND THE ALLEGED INCIDENT LOCATION

FIGURE 3: LOCATION OF ALLEGED IMPACT POINTS

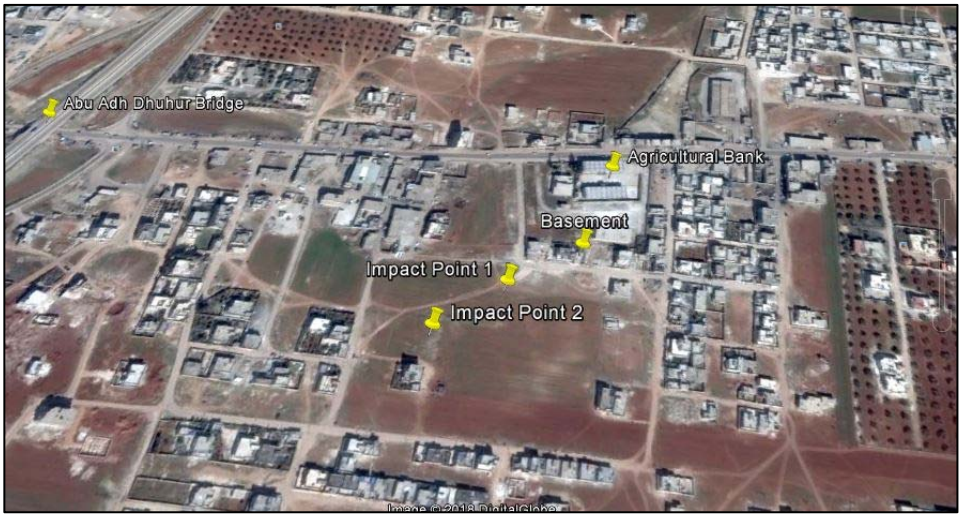


FIGURE 4: PANORAMIC VIEW OF THE ALLEGED IMPACT POINTS

5.13 Since no explosion was heard, one occupant exited the basement a few minutes after impact to assess the situation. He returned to basement and reported an odour of chlorine. Shortly afterwards, he lost consciousness. The remaining occupants in the basement shelter reported a pungent odour and immediately developed shortness of breath, nausea, and a burning sensation in the eyes. Some of them reported losing consciousness.

5.14 Witnesses described the odour as similar to household cleaning products, such as the local commercial brands “Clor” and “Flash”, or bleach. They added that the odour was stronger than these products.

5.15 Witnesses reported being notified of the possible use of toxic gases and were advised to go to higher ground. They headed to the rooftop of an adjacent building. On the way upstairs, a few of them lost consciousness and others struggled to reach the roof. They reported helping each other climb the stairs and using cloths to cover their mouth and nose. They also reported calling for rescue via a hand-held radio.

5.16 First responders indicated that following the notification of the possible use of toxic gases, the SCD and other ambulance teams received information via radio that a helicopter was flying over the eastern neighbourhood. Approximately five minutes after receiving the notification, they arrived at the site of the incident.

5.17 The first responders reported being directed via radio towards an open field located in the eastern neighbourhood of Saraqib, in Al Talil, approximately 400 metres to the east of the Abu Adh Dhuhur Bridge (located on the Damascus–Aleppo Highway) and to the south of the Agricultural Bank.

5.18 The first team of three SCD rescuers arrived at the site. The first rescuer stepped out of the vehicle felt a strange smell and immediately covered his nose and mouth with a paper mask; but had difficulty breathing and lost consciousness. While en route to the medical point, other team members reported developing similar symptoms.

5.19 Other teams responded to the site and found casualties presenting with difficulty breathing and disorientation. They stated that they administered oxygen and transported the casualties to the MF.

5.20 Upon arrival at the MF, the casualties were undressed and washed with water by the SCD before entering. Two of the casualties required assistance to enter the facility.

5.21 Treating medical personnel reported the arrival of 11 adult male casualties in the span of 45 to 60 minutes, starting at 21:45. They were brought by SCD rescue cars and other ambulances. Patients displayed nausea, eye irritation, and excessive secretions. They also presented with shortness of breath, coughing, wheezing, and crepitus during auscultation. Medical personnel reported the absence of any signs of external trauma.

5.22 Three of the eleven casualties belonged to SCD rescue teams, and the remaining eight were those who had initially taken shelter in the basement. No secondary exposure was reported.

5.23 Witnesses described how samples were collected in relation to the two "barrels" in the early hours of 5 February 2018 by the SCD sample collection team. Samples included soil, grass, and wipes taken from the "barrel" and from different points in the area of the alleged chemical incident. Samples were later delivered to the FFM (see Figure 5 below).

5.24 A change of colour of the vegetation around the impact points was reported with some witnesses indicating that the grass appeared "burned" and/or "dry".

FIGURE 5: SAMPLING PROCESS

Sampling Cylinder 1

Sampling Cylinder 2

4 February 2018 – Epidemiological analysis

5.25 The team interviewed two physicians, four medical support staff, six rescuers, three of whom were also affected, one spotter, one media operator, one sampler, and four other affected people.

5.26 While the sampler and media operator were not at the site at the time of the alleged incident, they were able to provide the means of cross-checking and corroborating contextual and geographic information.

5.27 The number of causalities reported in medical records was 11, all male 10 of whom were aged between 20 and 40 and one who was in his fifties. Complaints, treatment, and disposition were obtained from the witnesses themselves and by physicians and from patient records from the MF.

Information gathered from medical personnel

5.28 Casualties presented with an odour of chlorine on their clothing and were undressed and washed with water prior to entering the MF. Initial treatment was provided by nurses.

5.29 Admission records documented that eight patients presented with mild signs and symptoms and three presented with moderate symptoms; none presented severe signs and symptoms. Physicians described, from memory, nine ambulatory patients presenting with mild signs and symptoms of exposure, while two other patients presented with moderate signs and symptoms, displaying an altered mental state that required them to be assisted.

5.30 The FFM attributed the difference between testimony and records as a lapse of memory with respect to detail and assigned greater credibility to the documented numbers. These are the numbers indicated in Figure 7 below.

5.31 Patients displayed nausea, eye irritation, expectoration, and excessive secretions. They also presented with shortness of breath, coughing, wheezing, and crepitus during auscultation. Gastrointestinal signs and symptoms included nausea and, in some cases, vomiting. Casualties were also described as presenting with constricted pupils.

5.32 Medical personnel reported the absence of any signs of external trauma.

5.33 All cases were treated with oxygen, salbutamol, hydrocortisone, metoclopramide, atropine, ranitidine, and meclizine. In the case of two moderate presentations, midazolam was administered for agitation. Administration of nebulised sodium bicarbonate and lidocaine was also reported by nursing staff, but the number of patients receiving the treatment was non-specific.

5.34 No chest X-rays were performed on any of the casualties.

5.35 Nine casualties were discharged within two hours of arrival, while two others needed approximately two hours of treatment and observation before being discharged.

5.36 No biomedical samples were taken.

Onset in relation to the alleged incident

5.37 Most of the signs and symptoms presented were consistent with exposure to an irritant gas.

FIGURE 6: PATIENT PRESENTATION AT MF

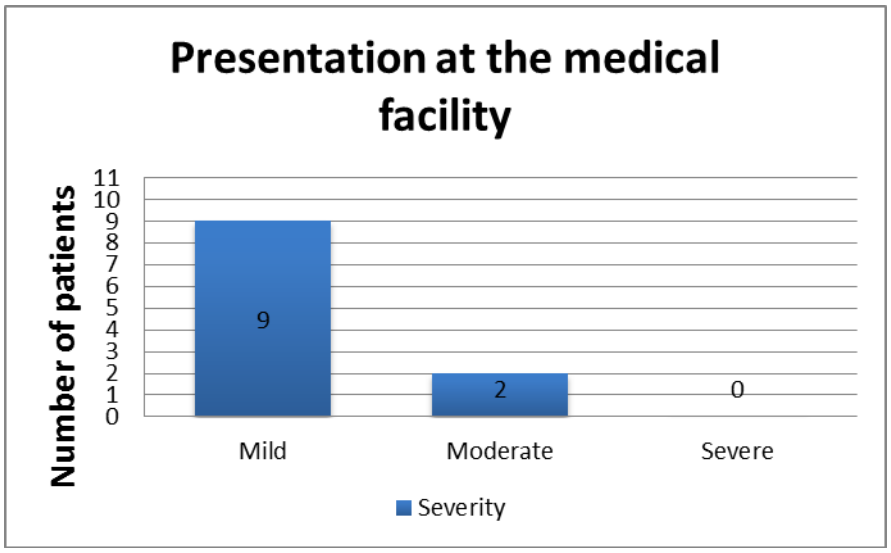


FIGURE 7: SIGNS AND SYMPTOMS

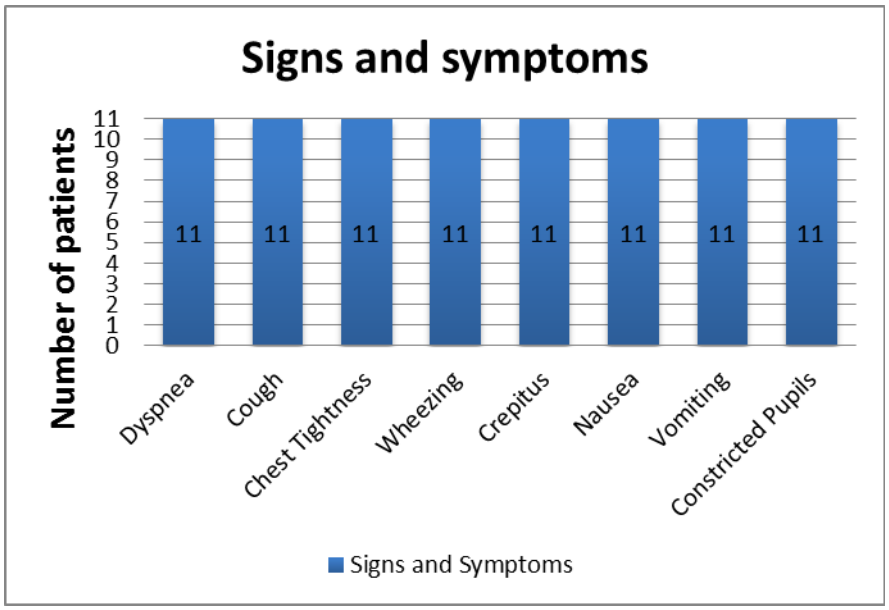
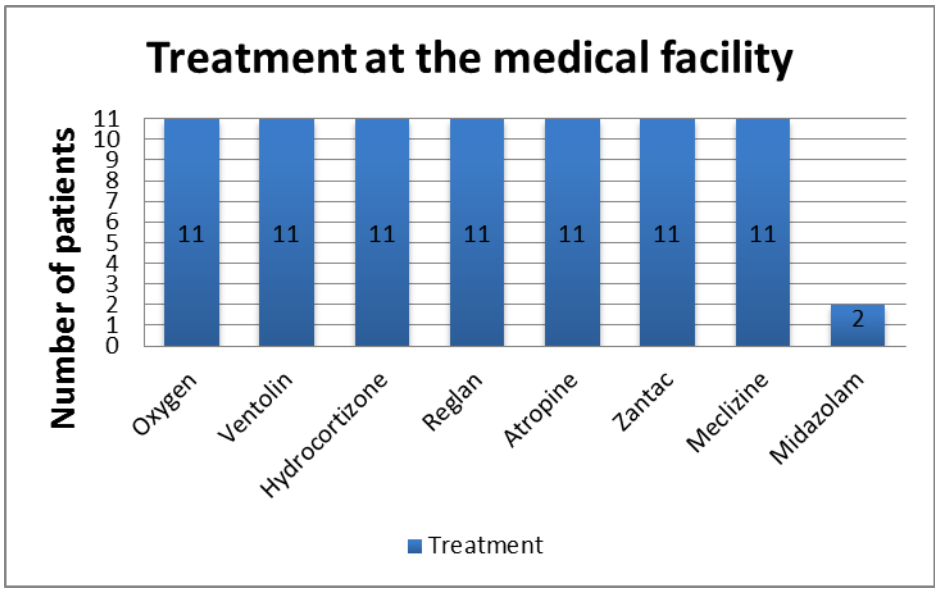


FIGURE 8: TREATMENT AT MF



4 February 2018 – Environmental samples

5.38 On 19 February 2018, the FFM received soil and vegetation samples, as well as metal objects.

5.39 At the time of handover, the team was informed that all samples had been taken by the SCD on 5 February 2018. Two members involved in the sample collection process were present at the handover and provided information on every sample. This information was supported by interviewing one sampler and one media operator, who was responsible for documenting the sampling process. Photos and videos were delivered to the FFM team and the methodology of sampling and documenting was described during interviews.

5.40 Additionally, the FFM examined the two cylinders allegedly used in the incident for the delivery and dispersion of chemicals, and collected their own samples from the cylinders on 19 February 2018.

5.41 On reviewing the photographs and video related to the sampling process, the FFM noted that the original location of Cylinder 1 was different to its location at the time of sampling. Hence, samples that refer to Impact Point 1 were taken from the final resting point of the cylinder rather than from its original impact point. The FFM clarified these details during interviews.

5.42 Samples were split at the OPCW Laboratory before being transported to designated laboratories.

Cylinder analysis

5.43 The items were made of metal and yellow paint was still visible on them. They were significantly deformed and displayed signs of physical damage, including rupture. Rust was also visible and present to a greater degree on the upper and inner surfaces of the items.

5.44 The shape and the markings on the containers were consistent with common industrial liquefied gas cylinders.

5.45 The total length (height) of each cylinder was approximately 1,400 mm, with a base diameter of approximately 330 mm and cylinder body diameter of 350 mm.

FIGURE 9: CYLINDER MEASUREMENTS

5.46 The cylinders were made of metal with a wall thickness of approximately 6 mm. The body was made of a rectangular sheet formed and welded into a cylindrical shape, with additional parts welded to each end. Inside of the cylinder, there was a metal bar welded transversally inside the cylinder. The metal bar was approximately 50 mm wide with a hole in the middle and a diameter of approximately 30 mm.

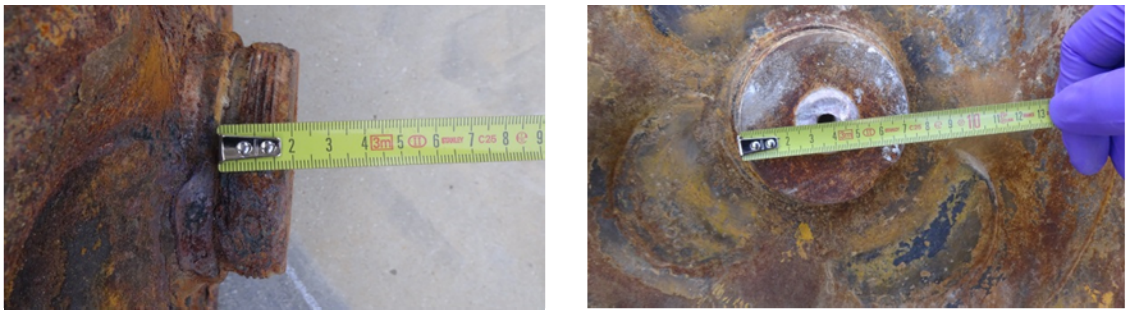
FIGURE 10: INSIDE VIEW OF THE CYLINDER

5.47 A support ring was welded to the external base of the cylinder. The diameter of the base ring was 330 mm and the height approximately 100 mm. The four holes present at the base had a diameter of approximately 30 mm.

FIGURE 11: CYLINDER BASE

5.48 At the top of each cylinder, the valve well was still visible with dimensions of approximately 70 mm in diameter and 20 mm in height.

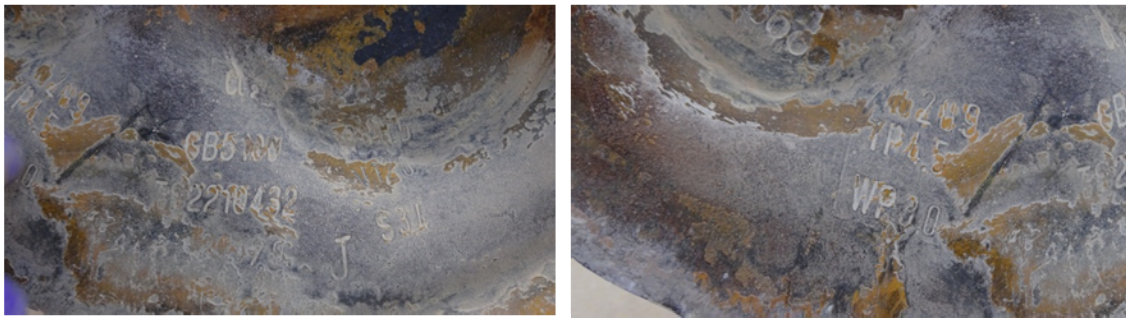
FIGURE 12: TOP OF THE CYLINDER



5.49 Cylinder capacity was estimated as being between 100 and 120 litres.

5.50 At the top part of both cylinders stamped markings were still visible. Among the various stamps was the alphanumeric CL_2.

FIGURE 13: CYLINDER MARKINGS



5.51 The top of each cylinder was ruptured, one more so than the other. The ruptures do not appear to have been caused by an explosive charge and were most likely caused by significant mechanical force on the body of a pressurised container.

5.52 One of the cylinders also had an additional structure attached to its side. The attachment comprised metal rings, tubes and flat sheets of metal were visible but significantly deformed and covered with rust.

FIGURE 14: VISIBLE DAMAGE AND ADDITIONAL STRUCTURE ATTACHED TO ONE CYLINDER

5.53 Tables 3, 4, and 5 below list the samples received by the FFM and the subsequent analysis results. Table 6 gives results of analyses performed on vegetation samples and summarises experiments performed on grass by one of the designated laboratories.

TABLE 3: SAMPLES RECEIVED AND COLLECTED BY THE FACT-FINDING MISSION

	Report Ref	Evidence No.	Sample Code	Description	Picture
Impact Point 1	1.	20180219172332	FFM/47/18/WPS32	H_2O wipe from cylinder 1 collected by the FFM team	
	2.	20180219172306	FFM/47/18/WPS06	Wipe from inside cylinder 1	
	3.	20180219172303	FFM/47/18/SLS03	Soil near cylinder 1	

	Report Ref	Evidence No.	Sample Code	Description	Picture
	4.	20180219172304	FFM/47/18/SLS04	Soil near cylinder 1	
	5.	20180219172305	FFM/47/18/SLS05	Vegetation and soil at 5 m from the final resting point of cylinder 1	
	6.	20180219172302	FFM/47/18/SLS02	Soil at 50 m from the final resting point of cylinder 1	
Impact Point 2	7.	20180219172333	FFM/47/18/WPS33	H_2O wipe from cylinder 2 collected by the FFM team	

	Report Ref	Evidence No.	Sample Code	Description	Picture
	8.	20180219172307	FFM/47/18/WPS07	Wipe from inside cylinder 2	
	9.	20180219172309	FFM/47/18/SLS09	Soil from the crater of cylinder 2 under a metal piece	
	10.	20180219172308	FFM/47/18/SLS08	Soil from crater of cylinder 2	
	11.	20180219172310	FFM/47/18/SLS10	Soil from crater of cylinder 2	

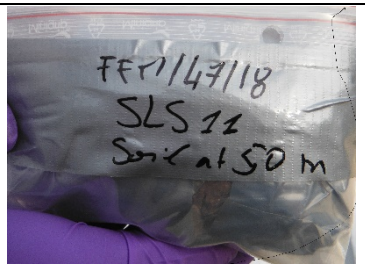
	Report Ref	Evidence No.	Sample Code	Description	Picture
	12.	20180219172312	FFM/47/18/SDS12	Metal piece from crater of cylinder 2	
	13.	20180219172311	FFM/47/18/SLS11	Soil at 50 m from crater of cylinder 2	
	14.	20180219172301	FFM/47/18/SLS01	Grass at 10 m from cylinder 2	

TABLE 4: ANALYTICAL RESULTS FROM DESIGNATED LABORATORIES FOR ORGANIC COMPOUNDS

		Results DL2	Results DL3
Report Ref	**Description**	Organic Compound(s)	Organic Compound(s)
1.	H_2O wipe from cylinder 1 collected by the FFM team	Tris(chloropropyl)phosphate (trace level)	Isopropyl methylphosphonate / IPMPA
2.	Wipe from inside cylinder 1	Chloroacetic acid Dichloroacetic acid	
3.	Soil near cylinder 1	Diisopropyl methylphosphonate (trace level) Dichloroacetic acid Isopropyl methylphosphonate (trace level)	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA Methylphosphonic acid / MPA
4.	Soil near cylinder 1	Chloroacetic acid Diisopropyl methylphosphonate (trace level) Tetrachlorobenzene (trace level) Bis(dichloropropyl) ether (trace level)	Diisopropyl methylphosphonate / DIMP Methylphosphonic acid / MPA
5.	Vegetation and soil at 5 m from the final resting point of cylinder 1	Diisopropyl methylphosphonate (trace level) Chloromethylphenol (trace level) Dichloromethoxybenzene (trace level)	Diisopropyl methylphosphonate / DIMP
6.	Soil at 50 m from the final resting point of cylinder 1	Bis(dichloropropyl)ether (trace level) Diisopropyl methylphosphonate (trace level)	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA Methylphosphonic acid / MPA
7.	H_2O wipe from cylinder 2 collected by the FFM team	Pyrophosphoric acid Tris(chloropropyl)phosphate (trace level)	Isopropyl methylphosphonate / IPMPA
8.	Wipe from inside cylinder 2	Dichloroacetic acid	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA 2,4,6-Trinitrotoluene / TNT
9.	Soil from the crater of cylinder 2 under a metal piece	Chloral hydrate 2,4-Dichlorophenol Trichloroacetic acid Diisopropyl methylphosphonate / DIMP 2,4,6-Trinitrotoluene / TNT	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA 2,4,6-Trinitrotoluene / TNT
10	Soil from crater of cylinder 2	2,2,2-Trichloroethanol Trichloroacetic acid Chloroacetic acid 2,4-Dinitrotoluene	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA 2,4,6-Trinitrotoluene / TNT

		Results DL2	Results DL3
Report Ref	**Description**	Organic Compound(s)	Organic Compound(s)
		4-Amino-2,6-dinitrotoluene 2-Amino-4,6-dinitrotoluene 2,4,6-Trinitrotoluene / TNT	
11.	Soil from the crater of cylinder 2	Chloral hydrate Chloroacetic acid Trichloroacetic acid 2,4,6-Trinitrotoluene / TNT	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA 2,4,6-Trinitrotoluene / TNT
12.	Metal piece from the crater of cylinder 2	Chloroacetic acid 2,4,6-Trinitrotoluene / TNT (trace level)	Isopropyl methylphosphonate / IPMPA 2,4,6-Trinitrotoluene / TNT
13.	Soil at 50 m from crater of cylinder 2	2,2,2-Trichloroethanol 2,4,6-Trinitrotoluene / TNT Diisopropyl methylphosphonate (trace level)	Diisopropyl methylphosphonate / DIMP Isopropyl methylphosphonate / IPMPA
14.	Grass at 10 m from cylinder 2	2,4,6-Trichlorophenol Tetrachloroethane (trace level) Dichloromethoxybenzene (trace level) Dichloroacetic acid Trichloroacetic acid (trace level)	Isopropyl methylphosphonate / IPMPA

TABLE 5: ANALYTICAL RESULTS FROM DESIGNATED LABORATORIES FOR ANIONS AND CATIONS

		Concentration in ppm												
Report Ref	**Sample Description**	**Cl^-**	**F^-**	**NO_2^-**	**Br^-**	**NO_3^-**	**PO_4^{3-}**	**SO_4^{2-}**	**K^+**	**Ca^{2+}**	**Li^+**	**Na^+**	**NH_4^+**	**Mg^{2+}**
1.	H_2O wipe from cylinder 1 collected by the FFM team	73	<1.2	20	<8	120	<8.9	120	<11	65	<1.4	100	21	<1.8
2.	Wipe from inside cylinder 1	15000	<2.4	<3.2	<16	230	<18	<18	N.D	540	<2.8	380	30	<3.6
3.	Soil near cylinder 1	170	20	20	<8	130	<8.9	130	<11	130	<1.4	120	26	<1.8
4.	Soil near cylinder 1	170	19	21	<8	140	<8.9	130	35	120	<1.4	120	26	<1.8

		Concentration in ppm												
Report Ref	**Sample Description**	**Cl^-**	**F^-**	**NO_2^-**	**Br^-**	**NO_3^-**	**PO_4^{3-}**	**SO_4^{2-}**	**K^+**	**Ca^{2+}**	**Li^+**	**Na^+**	**NH_4^+**	**Mg^{2+}**
5.	Vegetation and soil at 5m from the final resting point of cylinder 1	170	20	20	<8	120	<8.9	140	87	97	<1.4	110	52	<1.8
6.	Soil at 50 m from the final resting point of cylinder 1	190	18	20	<8	120	<8.9	130	35	140	<1.4	110	32	9
7.	H_2O wipe from cylinder 2 collected by the FFM team	75	<1.2	20	<8	<7.2	<8.9	120	<11	45	<1.4	110	21	11
8.	Wipe from inside cylinder 2	320	2.4	35	<16	230	<18	260	<21	34	<2.8	280	12	<3.6
9.	Soil from the crater of cylinder 2 under a metal piece	14000	<1.2	<1.6	100	140	<8.9	130	770	7400	<1.4	140	52	46
10.	Soil from crater of cylinder 2	2000	18	20	<8	130	<8.9	140	960	590	<1.4	130	46	<1.8
11.	Soil from the crater of cylinder 2	4200	<1.2	17	570	130	<8.9	130	680	2200	2	86	34	7
12.	Metal piece from the crater of cylinder 2	1100	<1.2	19	<8	120	<8.9	120	25	580	<1.4	91	22	22
13.	Soil at 50 m from crater of cylinder 2	780	<1.2	17	<8	110	<8.9	140	600	200	<1.4	48	18	8
14.	Grass at 10 m from cylinder 2	22000	61	29	14	140	970	1400	27000	850	<1.4	620	780	310
A01	System Blank	71	<1.2	20	<8	130	<8.9	120	<11	<15	1.4	110	20	1.8
A06	Dry Wipe (Blank)	71	19	22	<8	120	<8.9	120	<11	<15	<1.4	150	21	<1.8
A07	System Blank (H_2O)	69	<1.2	20	<8	120	<8.9	<9.1	<11	<15	<1.4	81	16	<1.8

TABLE 6: CHLORINE GAS EXPOSURE EXPERIMENTS AND RESULTS ON VEGETATION SAMPLES

		Concentration in ppm												
Report Ref	**Sample Description**	**Cl^-**	**F^-**	**NO_2^-**	**Br^-**	**NO_3^-**	**PO_4^{3-}**	**SO_4^{2-}**	**K^+**	**Ca^{2+}**	**Li^+**	**Na^+**	**NH_4^+**	**Mg^{2+}**
A01	System Blank (D_2O)	71	1.2	20	8	130	8.9	120	11	15	1.4	110	20	1.8
A02	Neg Control: D_2O- Extract Grass	200	21	1.6	8	7.2	8.9	120	140	27	1.4	110	6	1.8
A03	Pos. Control: D_2O- Extract Cl_2 exposed Grass	18000	88	1.5	81	150	370	1400	2500	2300	3	230	78	250
14	Grass at 10 m from Cylinder 2	22000	61	29	14	140	970	1400	27000	850	1.4	620	780	310
	Conc. Ratio [A03] / [A02]	90	4	1	10	21	42	12	18	85	2	2	13	139
	Conc. Ratio [14] / [A02]	110	3	18	2	19	109	12	193	31	1	6	130	172

A02: Deuterium oxide (D_2O) extract of a grass **not exposed** to chlorine gas.

A03: Deuterium oxide (D_2O) extract of a grass **exposed** to chlorine gas.

14: Sample received by FFM team

Conc.: Concentration

5.54 Laboratory analysis related to the cylinder itself shows the presence of chloride along with anions typically associated with material of construction of industrial cylinders. This, coupled with the absence of other chemicals, enabled the FFM to determine that the cylinders had been previously used for the storage of chlorine.

5.55 Some other samples, particularly the soil samples, indicate the presence of chloride, bromide, potassium, and ammonium ions at elevated concentrations, which would not necessarily be expected as occurring naturally in the local environment. The FFM also noted the presence of high levels of calcium ions and lower levels of magnesium.

5.56 The variations in concentration and ratios of potassium and ammonium are consistent with the use of fertiliser, the presence of which would be expected.

5.57 In the raw material for the production of chlorine, bromide is an expected contaminant that is not always removed in the production process. This bromine/bromide is often present in downstream products, and therefore could be expected to be present, at significantly lower concentrations, whenever chlorine/chloride is detected.

5.58 Limestone is a common building material that also forms the bedrock of the area. As such, calcium would be expected to be prevalent in all soil samples. This explains the high levels found in some samples, along with magnesium, which is commonly found to a lesser extent in natural limestone formations.

5.59 Organic analysis of samples indicates the presence of chlorinated compounds. A number, but not all, of these compounds are plasticisers or flame retardants. However, the number of such compounds in a location where such a variety of chlorinated compounds would not be expected is a strong indicator that they were more likely produced by chlorination of compounds, which would be more likely to be present with chlorine.

5.60 The concentrations of chloride in the environmental samples are at concentrations above those which would occur naturally and would have any longevity. Aside from external factors recently increasing the concentration of chloride locally, these levels cannot otherwise be explained.

6. EXCHANGE OF INFORMATION WITH THE GOVERNMENT OF THE SYRIAN ARAB REPUBLIC

6.1 The Technical Secretariat (hereinafter "the Secretariat") addressed Note Verbale NV/ODG/214066/18 on 6 March 2018 to the Syrian Arab Republic regarding the FFM activities concerning an alleged incident involving the use of toxic chemicals as weapons in Saraqib, Idlib, the Syrian Arab Republic, on 4 February 2018, and requested that the Government of the Syrian Arab Republic provide any information and materials it may have in relation to the reported incident.

6.2 The Syrian Arab Republic replied with a three-page summary report attached to classified Note Verbale No. 23 dated 12 March 2018. In this summary report, the Syrian Arab Republic shared with the Secretariat the following:

(a) Saraqib had not been under the control of the Syrian Government for a long period of time, including the time of the incident; and

(b) a technical analysis of the alleged incident based on open-source media.

6.3 The Secretariat replied with Note Verbale NV/ODG/214203/18 on 14 March 2018 requesting additional supporting information.

6.4 At the time of writing, the Secretariat had not received the requested additional supporting information.

7. CONCLUSIONS

7.1 As with other allegations investigated by the FFM, the team was not able to visit a secured site immediately after the alleged incident. The potential for access was made more difficult as the area was predominantly a military area with ongoing conflict prior to the alleged incident, through to the time at which this report was being drafted. The team therefore relied on the testimony of interviewees, samples as made available by the interviewees, and limited hospital records.

7.2 The FFM had limited access to associated medical records and was unable to visit hospitals that may have admitted patients. Interviewees gave a consistent narrative of the incident, the reported medical signs and symptoms, and the way samples were collected. The FFM was able to place witnesses at the site at the time and correlate their medical assessment. Based on these factors, the FFM determined that 11 people displayed medical signs and symptoms associated with exposure to a chemical that primarily irritates tissue such as eyes, nose, throat, and lungs.

7.3 Through interviews and review of video evidence supplied at interview, the FFM was able to determine that environmental samples, including cylinders, were retrieved from the site of the allegation.

7.4 The FFM determined that chlorine, released from cylinders through mechanical impact, was likely used as a chemical weapon on 4 February 2018 in the Al Talil neighbourhood of Saraqib. This conclusion is based on:

(a) the presence of two cylinders, which were determined by the FFM as previously containing chlorine;

(b) the testimony of witnesses, who identified the cylinders as impacting the location on 4 February 2018;

(c) environmental analyses, demonstrating the unusual presence of chlorine in the local environment; and

(d) a number of patients who presented for treatment at medical facilities shortly after the incident, and showed signs and symptoms of irritation of tissue, which were consistent with exposure to chlorine and other toxic chemicals.

7.5 The FFM also noted the presence of chemicals that can neither be explained as occurring naturally in the environment nor as being related to chlorine. Furthermore, some of the medical signs and symptoms reported were different to those that would be expected from exposure to pure chlorine. There was insufficient information and evidence to enable the FFM to draw any further conclusions on these chemicals at this stage.

Annexes (English only):

Annex 1: Reference Documentation
Annex 2: Open Sources
Annex 3: Information Obtained by the Fact-Finding Mission

Annex 1

REFERENCE DOCUMENTATION

	Document Reference	Full title of Document
1.	QDOC/INS/SOP/IAU01 (Issue 1, Revision 1)	Standard Operating Procedure for Evidence Collection, Documentation, Chain-of-Custody and Preservation during an Investigation of Alleged Use of Chemical Weapons
2.	QDOC/INS/WI/IAU05 (Issue 1, Revision 2)	Work Instruction for Conducting Interviews during an Investigation of Alleged Use
3.	QDOC/INS/SOP/IAU02 (Issue 1, Revision 0)	Standard Operating Procedure Investigation of Alleged Use (IAU) Operations
4.	QDOC/INS/SOP/GG011 (Issue 1, Revision 0)	Standard Operating Procedure for Managing Inspection Laptops and other Confidentiality Support Materials
5.	QDOC/LAB/SOP/OSA2 (Issue 1, Revision 2)	Standard Operating Procedure for Off-Site Analysis of Authentic Samples
6.	QDOC/LAB/WI/CS01 (Issue 1, Revision 2)	Work Instruction for Handling of Authentic Samples from Inspection Sites and Packing Off-Site Samples at the OPCW Laboratory
7.	QDOC/LAB/WI/OSA3 (Issue 2, Revision 1)	The chain of custody and documentation for OPCW samples on-site
8.	QDOC/LAB/WI/OSA4 (Issue 1, Revision 3)	Work Instruction for Packing of Off-Site Samples

Annex 2

OPEN SOURCES

Open source internet links related to the Al Ltamenah incident
• https://www.haaretz.com/middle-east-news/syria/syrian-civilians-hit-by-chlorine-gas-attack-activists-say-1.5788942https://syria.liveuamap.com/en/2018/4-february-saraqeb-syriacivildef-teams-respond-to-an-attack • https://twitter.com/SyriaCivilDef/status/960261610454618113 • http://aa.com.tr/en/vg/video-gallery/syrian-regime-continues-to-use-allegedly-chlorine-gas-in-idlib/0 • http://www.bbc.co.uk/programmes/p05x40s4?ocid=socialflow_twitter • http://www.bbc.com/news/world-middle-east-42944033 • http://www.dailyjournal.net/2018/02/04/ml-syria-gas-attack/ • http://www.metronews.ca/news/world/2018/02/04/syrian-activists-say-civilians-hit-by-chlorine-gas-attack.html • http://www.rudaw.net/mobile/english/middleeast/syria/05022018 • http://www.scmp.com/news/world/middle-east/article/2132217/carnage-syria-continues-government-raids-kill-29-and-war • https://edition.cnn.com/2018/02/05/middleeast/syria-chlorine-idlib-russia-intl/ • https://www.facebook.com/EdlibEmc1/posts/2024135344466691 • https://m.facebook.com/story.php?story_fbid=1200664886703531&id=648124961957529 • https://twitter.com/Conflicts/status/960272586348400641 • https://twitter.com/EliotHiggins/status/960253962191556608 • https://twitter.com/IHHen/status/960276642160627714 • https://twitter.com/JakeGodin/status/960343029319196673 • https://twitter.com/JakeGodin/status/960558930828169221 • https://twitter.com/leloveluck/status/960253700945186817 • https://twitter.com/MGhorab3/status/960534586215288832 • https://twitter.com/Rabya_Nasri/status/960286667440615425

Open source internet links related to the Al Ltamenah incident
• https://twitter.com/StanteaR_/status/960245206846144513 • https://www.gettyimages.nl/detail/video/wounded-people-receive-treatment-at-a-hospital-after-nieuwsfootage/914641786 • https://www.israelnationalnews.com/News/News.aspx/241551 • https://www.israelnationalnews.com/News/News.aspx/241563 • https://www.middleeastmonitor.com/20180205-syrian-opposition-urges-un-take-action-on-idlib-attack/ • https://m.washingtontimes.com/news/2018/feb/4/syrian-activists-say-civilians-hit-by-chlorine-gas/ • https://www.bellingcat.com/news/mena/2018/02/14/evidence-february-4th-2018-chlorine-attack-saraqib-idlib/ • https://www.state.gov/r/pa/prs/ps/2018/02/277992.htm • http://sn4hr.org/wp-content/pdf/english/Syrian_Regime%E2%80%99s_Chemical_Terrorism_Hits_Syrians_for_the_211th_Time_en.pdf • https://salonsyria.com/syria-in-a-week-5-february-2018/#.WpQVTa6nHcs • https://www.youtube.com/watch?v=uzf0K0gzZeQ • https://syria.liveuamap.com/en/2018/4-february-saraqeb-syriacivildef-teams-respond-to-an-attack

Annex 3

INFORMATION OBTAINED BY THE FACT-FINDING MISSION

Table A3.1 below summarises the list of physical evidence collected from various sources by the FFM. It is split into electronic evidence stored in electronic media storage devices such as USB sticks and micro SD cards, hard copy evidence, and samples. Electronic files include audio-visual captions, still images, and documents. Hard copy files consist of various documents, including drawings made by witnesses. The table also shows the list of samples collected from various sources, including environmental samples, such as gravel and soil, and other samples, such as metal pieces, and fragments.

TABLE A3.1 PHYSICAL EVIDENCE COLLECTED BY THE FACT-FINDING MISSION TEAM

Entry Number	Evidence description	Evidence reference number	Evidence source
	Electronic and hard copy files and documents		
1.	Transcend 4GB SD Card - 20 images and 3 Videos	20180216171603	Handed over by 1716
2.	Transcend 4GB SD Card - 1 image	20180303172103	Handed over by 1721
3.	Transcend 16GB µSD Card - 8 images	20180214172503	Handed over by 1725
4.	Kingston 32GB µSD Card - 129 images and 56 videos	20180211172302	Handed over by SCD
	Samples		
1.	Grass at 10 m from cylinder 2	20180219172301	Syria Civil Defence
2.	Soil at 50 m from the final resting point of cylinder 1	20180219172302	Syria Civil Defence
3.	Soil from the final resting point of cylinder 1	20180219172303	Syria Civil Defence
4.	Soil from the final resting point of cylinder 1	20180219172304	Syria Civil Defence
5.	Vegetation and soil at 5 m from cylinder 1	20180219172305	Syria Civil Defence
6.	Wipe from inside cylinder 1	20180219172306	Syria Civil Defence
7.	Wipe from inside cylinder 2	20180219172307	Syria Civil Defence
8.	Soil from crater of cylinder 2	20180219172308	Syria Civil Defence
9.	Soil from the crater of cylinder 2 under a metal piece	20180219172309	Syria Civil Defence

Entry Number	Evidence description	Evidence reference number	Evidence source
10.	Soil from the crater of cylinder 2	20180219172310	Syria Civil Defence
11.	Soil at 50m from crater of cylinder 2	20180219172311	Syria Civil Defence
12.	Metal piece from the impact point of cylinder 2	20180219172312	Syria Civil Defence
13.	H_2O wipe from cylinder 1 collected by the team	20180219172332	Syria Civil Defence
14.	H_2O wipe from cylinder 2 collected by the team	20180219172333	Syria Civil Defence

TABLE A3.2 ELECTRONIC FILES COLLECTED BY THE FACT-FINDING MISSION TEAM

Interview Number	Folder Location	File Names			
1716	D:\1716\evidence\1716	whatsapp image 2018-02-14 at 22.53.28.jpeg	whatsapp image 2018-02-14 at 22.53.31 (1).jpeg	whatsapp image 2018-02-14 at 22.53.31.jpeg	whatsapp image 2018-02-14 at 22.53.32.jpeg
		whatsapp image 2018-02-14 at 22.53.34.jpeg	whatsapp image 2018-02-14 at 22.53.35.jpeg	whatsapp image 2018-02-14 at 22.53.36.jpeg	whatsapp image 2018-02-14 at 22.53.37.jpeg
		whatsapp image 2018-02-14 at 22.53.38.jpeg	whatsapp image 2018-02-14 at 22.53.39.jpeg	whatsapp image 2018-02-14 at 22.53.40 (1).jpeg	whatsapp image 2018-02-14 at 22.53.40.jpeg
		whatsapp image 2018-02-14 at 22.53.41.jpeg	whatsapp image 2018-02-14 at 22.53.42.jpeg	whatsapp image 2018-02-14 at 22.53.43.jpeg	whatsapp image 2018-02-14 at 22.53.44.jpeg
		whatsapp image 2018-02-14 at 22.53.45.jpeg	whatsapp image 2018-02-14 at 22.53.47 (1).jpeg	whatsapp image 2018-02-14 at 22.53.47.jpeg	whatsapp image 2018-02-14 at 22.53.48.jpeg
		whatsapp video 2018-02-14 at 22.53.49.mp4	whatsapp video 2018-02-14 at 22.53.50.mp4	whatsapp video 2018-02-14 at 22.53.51.mp4	
	D:\1716\evidence\1716-working copy	whatsapp image 2018-02-14 at 22.53.28.jpeg	whatsapp image 2018-02-14 at 22.53.31 (1).jpeg	whatsapp image 2018-02-14 at 22.53.31.jpeg	whatsapp image 2018-02-14 at 22.53.32.jpeg
		whatsapp image 2018-02-14 at 22.53.34.jpeg	whatsapp image 2018-02-14 at 22.53.35.jpeg	whatsapp image 2018-02-14 at 22.53.36.jpeg	whatsapp image 2018-02-14 at 22.53.37.jpeg
		whatsapp image 2018-02-14 at 22.53.38.jpeg	whatsapp image 2018-02-14 at 22.53.39.jpeg	whatsapp image 2018-02-14 at 22.53.40 (1).jpeg	whatsapp image 2018-02-14 at 22.53.40.jpeg
		whatsapp image 2018-02-14 at 22.53.41.jpeg	whatsapp image 2018-02-14 at 22.53.42.jpeg	whatsapp image 2018-02-14 at 22.53.43.jpeg	whatsapp image 2018-02-14 at 22.53.44.jpeg
		whatsapp image 2018-02-14 at 22.53.45.jpeg	whatsapp image 2018-02-14 at 22.53.47 (1).jpeg	whatsapp image 2018-02-14 at 22.53.47.jpeg	whatsapp image 2018-02-14 at 22.53.48.jpeg
		whatsapp video 2018-02-14 at 22.53.49.mp4	whatsapp video 2018-02-14 at 22.53.50.mp4	whatsapp video 2018-02-14 at 22.53.51.mp4	
1721	D:\1721\evidence\sd	img-20180302-wa0129.jpg			

Interview Number	Folder Location	File Names			
1723	D:\1723\sampling photos and videos from scd\n0591-002.aoolf s1708 nk. 1\photo collect samples	ak9a0112.jpg	ak9a0113.jpg	ak9a0114.jpg	ak9a0115.jpg
		ak9a0116.jpg	ak9a0117.jpg	ak9a0118.jpg	ak9a0119.jpg
		ak9a0120.jpg	ak9a0121.jpg	ak9a0122.jpg	ak9a0123.jpg
		ak9a0124.jpg	ak9a0125.jpg	ak9a0126.jpg	ak9a0127.jpg
		ak9a0128.jpg	ak9a0129.jpg	ak9a0130.jpg	ak9a0131.jpg
		ak9a0132.jpg	ak9a0133.jpg	ak9a0134.jpg	ak9a0135.jpg
		ak9a0136.jpg	ak9a0137.jpg	ak9a0138.jpg	ak9a0139.jpg
		ak9a0140.jpg	ak9a0141.jpg	ak9a0142.jpg	ak9a0143.jpg
		ak9a0144.jpg	ak9a0145.jpg	ak9a0146.jpg	ak9a0147.jpg
		ak9a0148.jpg	ak9a0149.jpg	ak9a0152.jpg	ak9a0154.jpg
		ak9a0155.jpg	ak9a0156.jpg	ak9a0157.jpg	ak9a0158.jpg
		ak9a0159.jpg	ak9a0160.jpg	ak9a0161.jpg	ak9a0162.jpg
		ak9a0163.jpg	ak9a0164.jpg	ak9a0165.jpg	ak9a0166.jpg
		ak9a0167.jpg	ak9a0168.jpg	ak9a0169.jpg	ak9a0170.jpg
		ak9a0171.jpg	ak9a0172.jpg	ak9a0174.jpg	ak9a0175.jpg
		ak9a0176.jpg	ak9a0177.jpg	ak9a0178.jpg	ak9a0179.jpg
		ak9a0180.jpg	ak9a0181.jpg	ak9a0185.jpg	ak9a0186.jpg
		ak9a0187.jpg	ak9a0188.jpg	ak9a0189.jpg	ak9a0190.jpg
		ak9a0191.jpg	ak9a0192.jpg	ak9a0193.jpg	ak9a0194.jpg
		ak9a0195.jpg	ak9a0197.jpg	ak9a0198.jpg	ak9a0202.jpg
		ak9a0208.jpg	ak9a0209.jpg	ak9a0212.jpg	ak9a0213.jpg
		ak9a0214.jpg	ak9a0215.jpg	ak9a0216.jpg	ak9a0217.jpg
		ak9a0218.jpg	ak9a0219.jpg	ak9a0220.jpg	ak9a0221.jpg
		ak9a0222.jpg			
	D:\1723\sampling photos and videos from scd\n0591-002.aoolf s1708 nk. 1\photo injurd	img_1006.jpg	img_1016 (1).jpg	img_1016.jpg	img_1023.jpg
		img_1024.jpg	img_1025.jpg	img_1026.jpg	img_1027.jpg
		img_1028.jpg	img_1030.jpg	img_1031.jpg	img_1032.jpg
		img_1037.jpg	img_1038.jpg	img_1039.jpg	img_1042.jpg
		img_1043.jpg	img_1044.jpg	img_1049.jpg	img_1050.jpg

Interview Number	Folder Location	File Names			
		img_1051.jpg	img_1052.jpg	img_1055.jpg	img_1056.jpg
		img_1057.jpg	img_1058.jpg	img_1059.jpg	img_1060.jpg
		img_1061.jpg	img_1064.jpg	img_1069.jpg	img_1070.jpg
		img_1075.jpg	img_1076.jpg	img_1077.jpg	img_1083.jpg
	D:\1723\sampling photos and videos from scd\n0591-002.aoolf s1708 nk. 1\video injurd	mvi_1018.mov	mvi_1021.mov	mvi_1029.mov	mvi_1033.mov
		mvi_1034.mov	mvi_1035.mov	mvi_1036.mov	mvi_1040.mov
		mvi_1041.mov	mvi_1046.mov	mvi_1047.mov	mvi_1048.mov
		mvi_1062.mov	mvi_1078.mov	mvi_1080.mov	mvi_1081.mov
	D:\1723\sampling photos and videos from scd\n0591-002.aoolf s1708 nk. 1\videos collect samples\cannon cam	ak9a0150.mov	ak9a0151.mov	ak9a0153.mov	ak9a0173.mov
		ak9a0182.mov	ak9a0183.mov	ak9a0184.mov	ak9a0196.mov
		ak9a0199.mov	ak9a0200.mov	ak9a0201.mov	ak9a0203.mov
		ak9a0204.mov	ak9a0205.mov	ak9a0206.mov	ak9a0207.mov
		ak9a0210.mov	ak9a0211.mov	ak9a0223.mov	ak9a0224.mov
	D:\1723\sampling photos and videos from scd\n0591-002.aoolf s1708 nk. 1\videos collect samples\garmin cam	virb0015-2.mp4	virb0015-3.mp4	virb0015-4.mp4	virb0015.mp4
		virb0016.mp4	virb0017-2.mp4	virb0017-3.mp4	virb0017-4.mp4
		virb0017-5.mp4	virb0017.mp4	virb0018.mp4	virb0019.mp4
		virb0020.mp4			
	D:\1723\sampling photos and videos from scd\n0591-002.aoolf s1708 nk. 1\videos collect samples\video 360o	Dv0270084.mp4	Dv0280085.mp4	Dv0290086.mp4	Dv0310088.mp4
		Dv0320089 (1).mp4	Dv0320089.mp4	Dv0330090.mp4	
1725	D:\1725\evidence	img-20180205-wa0336.jpg	img-20180205-wa0338.jpg	img-20180205-wa0339.jpg	img-20180205-wa0340.jpg
		img-20180205-wa0341.jpg	img-20180205-wa0342.jpg	img-20180205-wa0343.jpg	img-20180205-wa0344.jpg

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