



OPCW

Executive Council

Ninetieth Session
12 – 15 March 2019

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26 April 2019
ENGLISH and RUSSIAN only

RUSSIAN FEDERATION

REQUEST FOR CIRCULATION OF A DOCUMENT

The Permanent Representation of the Russian Federation to the Organisation for the Prohibition of Chemical Weapons (OPCW) has requested the Technical Secretariat of the OPCW to circulate the attached document as an official document of the Ninetieth Session of the Executive Council.

Annex: Note Verbale No. 759 from the Permanent Representation of the Russian Federation to the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons, dated 26 April 2019



ANNEX

**NOTE VERBALE NO. 759 FROM THE PERMANENT REPRESENTATION
OF THE RUSSIAN FEDERATION TO THE TECHNICAL SECRETARIAT
OF THE ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS
DATED 26 APRIL 2019**



PERMANENT REPRESENTATION
OF THE RUSSIAN FEDERATION
TO THE ORGANISATION FOR THE PROHIBITION
OF CHEMICAL WEAPONS IN THE HAGUE

No 759

The Permanent Representation of the Russian Federation to the Organisation for the Prohibition of Chemical Weapons (OPCW) presents its compliments to the Technical Secretariat (hereinafter "the Secretariat") and has the honour to request it to circulate the Russian Federation's paper "Commentaries on the conclusions of the report of the Fact-Finding Mission on the use of chemical weapons in Syria regarding the alleged use of chemical weapons in Douma on 7 April 2018" as an official-series document of the Ninetieth Session of the OPCW Executive Council (12 to 15 March 2019).

The Permanent Representation avails itself of this opportunity to renew to the Secretariat the assurances of its highest consideration.

Attached: the above-mentioned paper (9 pages)

The Hague, 26 April 2019

[initials and stamp]

RUSSIAN FEDERATION

**COMMENTARIES ON THE CONCLUSIONS OF THE REPORT
OF THE FACT-FINDING MISSION ON THE USE OF CHEMICAL WEAPONS
IN SYRIA REGARDING THE ALLEGED USE OF CHEMICAL WEAPONS
IN DOUMA ON 7 APRIL 2018**

The Russian side, having thoroughly examined the "Report of the Fact-Finding Mission Regarding the Incident of Alleged Use of Toxic Chemicals as a Weapon in Douma, Syrian Arab Republic, on 7 April 2018" (S/1731/2019, dated 1 March 2019) (hereinafter "the Report"), and without calling into question the competence of OPCW experts that conducted the investigation, would like to draw the attention of the States Parties to the Chemical Weapons Convention (hereinafter "the Convention") and all stakeholders to a number of discrepancies and questions that arise after an analysis of the Report.

1. Witness testimonies, sample analysis, and the number of casualties

The conclusions based on witness testimonies, videos, and sample analyses are probabilistic and, at times, inconsistent, and can be called into question.

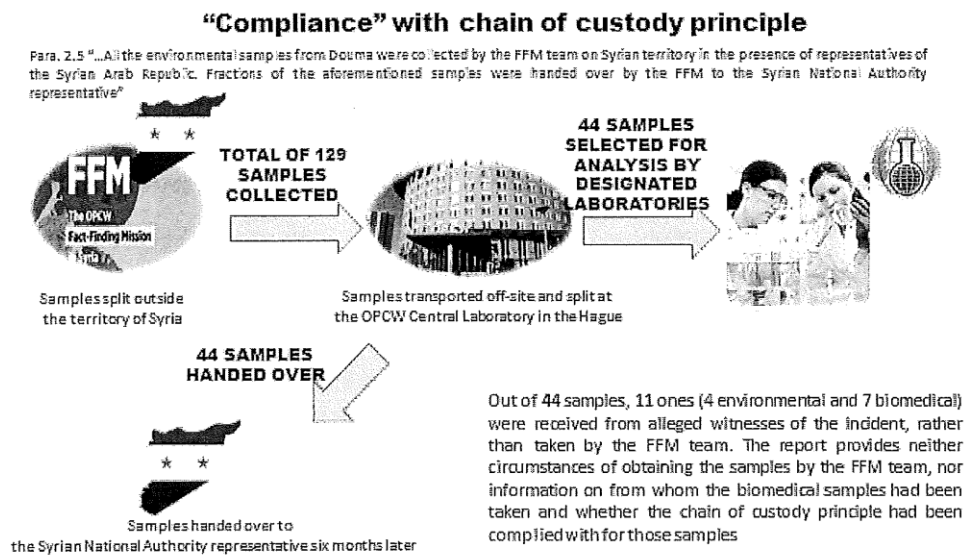
(a) Paragraph 2.5 of the Report reads: "All the environmental samples from Douma were collected by the FFM team on Syrian territory in the presence of representatives of the Syrian Arab Republic. Fractions of the aforementioned samples were handed over by the FFM to the Syrian National Authority representative".

However, the document does not indicate that the samples were split in the OPCW central laboratory, the Netherlands, rather than in the Syrian Arab Republic, and fractions of the aforementioned samples were handed over to the Syrian side only under insistent pressure and as late as six months after the Fact-Finding Mission (FFM) had completed its activities in Douma.

(b) Paragraph 8.5 of the Report reads: "... 129 samples in total were collected and transported to the OPCW Laboratory. To expedite analysis of those environmental samples considered to be of greatest probative value or of highest susceptibility to degradation, 31 samples were selected for the first round of analysis by the OPCW designated laboratories. An additional batch of 13 samples was sent for a second round of analysis at a later stage".

Out of the 129 samples, 39 were obtained from unidentified individuals staying outside the territory controlled by the Syrian Army. Forty-four samples — 33 environmental samples and 11 biomedical samples — were analysed.

Out of the aforementioned 44 samples, 11 (4 environmental samples and 7 biomedical samples) were obtained from alleged witnesses of the incident. The Report provides neither the circumstances of obtaining the samples by the FFM experts, nor information on the persons from whom the biomedical samples had been taken and whether the chain of custody principle had been complied with for those samples. Therefore, the samples, in our view, cannot be of priority evidentiary value.



(c) The environmental and biomedical samples were analysed in two unnamed OPCW designated laboratories (paragraph 8.6 of the Report). The analytical results and techniques may suggest that these OPCW designated laboratories are the laboratories that have already been engaged to investigate earlier incidents involving alleged uses of chlorine.

A question arises: with 20 designated laboratories available, of which 13 have technical agreements with the OPCW, why have the samples from the Syrian Arab Republic been analysed by only two (same) laboratories whose results bring up a number of questions?

For instance, in the analysis of the same samples (33 environmental samples), the results for chlorinated products provided by the two laboratories match in only one case (bornyl chloride in sample 22, see table below).

It should also be noted that the analysed samples from Location 4 (samples 18 to 21 and 23) display the presence of explosive trinitrotoluene. This brings us to the conclusion that the aperture in the roof in Location 4 was made by an explosion rather than a fallen cylinder that did not have serious damage.

Discrepancies observed while comparing the results of chemical analysis by two OPCW designated laboratories

No.	Description	D102	D103	No.	Description	D102	D103
2	Swab with water from inside the cylinder	Dichloroacetic acid, chlorides	Not found	17	Front part of the cylinder	Trichloroacetic acid, Trinitrotoluene	Chloride, iron, zinc, manganese
3	Cylinder thread	Dichloroacetic acid	Chloride, iron, zinc, manganese	18, 19	Wipes from cylinder and hexbed	Not found	Chloride, chlorine containing organic compounds (COCs), Trinitrotoluene
4	Debris under the cylinder	Dichloroacetic acid, trichloroacetic acid, chloroacetic acid, hydroxyacetic acid, chloroformaldehyde	2,4,6-Trinitrotoluene	20, 21	Blanket under cylinder	Dichloroacetic acid, trichloroacetic acid, chloroacetic acid, hydroxyacetic acid, chloroformaldehyde, Trinitrotoluene	Trinitrotoluene
5, 6	Wipe from the well	Not found	Chloride containing organic compounds (COCs)	22	Wood fragments from under the cylinder	BORNYL CHLORIDE, chlorides	BORNYL CHLORIDE, chlorides, phenol, 2,4,6-Trinitrophenol
7	Fragments from door	Dichloroacetic acid, trichloroacetic acid, chloroformaldehyde	Phenol, Trichloroethanol, Trinitrotoluene	23	Dry wipe from the well	No chemicals relevant to CWC have been found	Trinitrotoluene
8	Wipe from wall	Not found	Chloride containing organic compounds (COCs), Chloride, iron, zinc, manganese	24	Chips of paint from the well	Trichloroethanol, Trinitrotoluene, Amino chlorotoluene	Chloride, chlorine containing organic compounds (COCs), Zinc
9	Debris near the window	Dichloroacetic acid, trichloroacetic acid, chloroformaldehyde, Trinitrotoluene	Trinitrotoluene	25	Gloves	Dichloroacetic acid, trichloroacetic acid, chloroformaldehyde, Trinitrotoluene, amino chlorotoluene	Chloride, chlorine containing organic compounds (COCs), Zinc
10	Water tank support	Dichloroacetic acid, trichloroacetic acid	Aliphatic, phenol, bornyl chloride, 2,4,6-Trinitrophenol, Trinitrotoluene	26	Wall debris	Trichloroethanol, chloroformaldehyde, isobutylchloroethanol, chloroform, Diethylmethane, Ethylalcohol, Trinitrotoluene, amino chlorotoluene	Chloride, chlorine containing organic compounds (COCs), Trinitrotoluene
12	Wood fragments	Dichloroacetic acid, trichloroacetic acid	Phenol, Trichloroethanol, Trinitrotoluene	27	Wall debris	Not found	Trinitrotoluene
No hazardous chemicals found in samples 1, 11, 13, 15, 16 by both Dis							
Chlorinated compounds content found by both Dis in one case only (sample 22)							
Nitrotoluenes found in 6 samples by D102 and in 9 samples by D103							

(d) Paragraph 8.72 indicates that the FFM interviewed 39 people (four physicians, seven medical support staff, and 28 witnesses/casualties).

It is also indicated (in the footnote to paragraph 8.43) that the statements from witnesses of events in Douma that had been presented at the briefing held by the Russian Federation at the OPCW Headquarters on 26 April 2018 were dealt with by the FFM as other open-source materials. It is known, however, that out of 16 people who took part in the briefing, 10 had been interviewed by the FFM in Damascus two days earlier.

It is hard to understand why the OPCW experts did not pay due attention to the valuable actual witnesses of the incident who had been unequivocally recognised and identified in the staged videos filmed by the NGO "White Helmets" in Douma hospital (Location 1).

(e) Paragraph 8.73 of the Report reads: "The FFM could not establish the precise number of casualties; however, some sources reported that it ranged between 70 and 500. Others sources denied the presence of chemically-related casualties".

However, paragraph 8.74 and, further, conclusions of the FFM activities indicate that the number of dead in relation to alleged chemical exposure is reported by a number of witnesses to be 43, including men, women, adults, and children.

The Report provides no documentary evidence or grounds for that number of victims.

Based on interviews of witnesses and compilation of witness interview data, the number of dead/casualties does not correlate with the quantities of the alleged means of use of chlorine that were found.

The cylinders that were allegedly the means of use of chlorine were found on the top levels of buildings (Locations 2 and 4). In Location 4 there were no victims and two casualties that suffered from a burning sensation in the eyes, lacrimation, coughing, and vomiting. In Location 2, where alleged victims had been found, the wall of the building and the part of ceiling allegedly impacted by a chlorine cylinder were destroyed, which would result in good ventilation of the room where the cylinder was found. The cylinder found by the FFM in Location 2 has only slight deformation, and chlorine would have been released from the cylinder through an orifice of about 3 cm in diameter (Annex 6 to the Report — Visit to Location 2).

How could chlorine being released from the cylinder (with a capacity of about 60 to 70 kg), through a three-centimetre orifice, to the well-ventilated room located on the fourth floor have had that strong killing effect on alleged victims who were mainly on the first and second floors?

The FFM report does not explain this.

2. Computer simulation of falling chlorine cylinders

A significant part of the FFM report supports the conclusion that the post-impact position of the cylinders in the apartment blocks matches the damage observed. However, no specific calculation is provided, and no information is given on the names of experts involved, nor on their competence or authority.

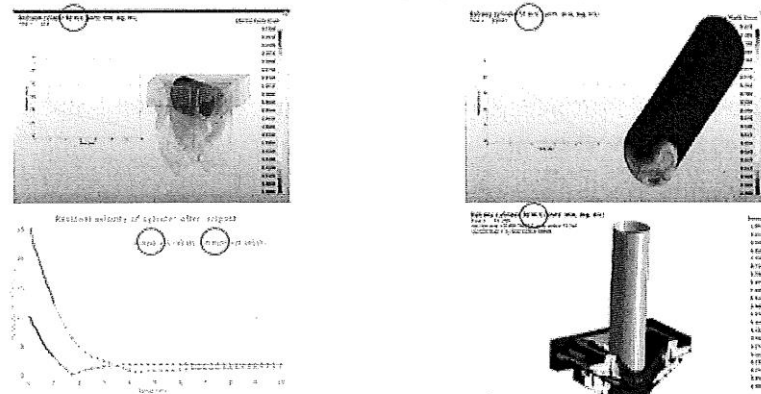
It should be noted that the experts that developed the simulation and estimated the impact of the cylinder on the building structures did not indicate in the Report what drop height was used for their estimation — which is of critical importance.

(a) Based on charts and diagrams in the Report (Figure 10 on page 18, Figure A.6.6 on page 56, and Figure A.6.7 (b) on page 57), the calculation was made for the cylinder impacting the barrier at a speed of 30 to 60 m/s, which relates to a drop height of 45 to 180 metres. Figure 12 (page 19) displays the graphs for the residual velocity of cylinders falling from 150 metres.

In contrast, Syrian Air Force helicopters do not fly at altitudes of less than 2000 metres when cruising over towns, for security reasons. A helicopter flying at 200 metres over an active combat zone will come under fire from small arms at the least, and will be inevitably shot down.

If a cylinder had been dropped from that altitude, it would have developed a vertical speed of about 200 m/s at the point of impact, and would have definitely not only destroyed the 20 cm thick roof, but would have caused more serious damage and would have been significantly damaged itself.

The assessment of the interaction of the cylinders with building structures was made for improper drop heights



The calculation was made for a cylinder colliding with a barrier at a speed of 30 to 60 meters per second, which is consistent with drop heights of 45 to 180 meters

(b) In the opinion of Russian experts with regard to the calculations conducted by the FFM, we observe in reality the picture described below.

The shape and dimensions of the resulting aperture at Location 2 are more consistent with the penetration of a solid body through the reinforced concrete barrier at an angle of 80 to 90 degrees to the surface. The same is applied to the deformation of the barrier rebar.

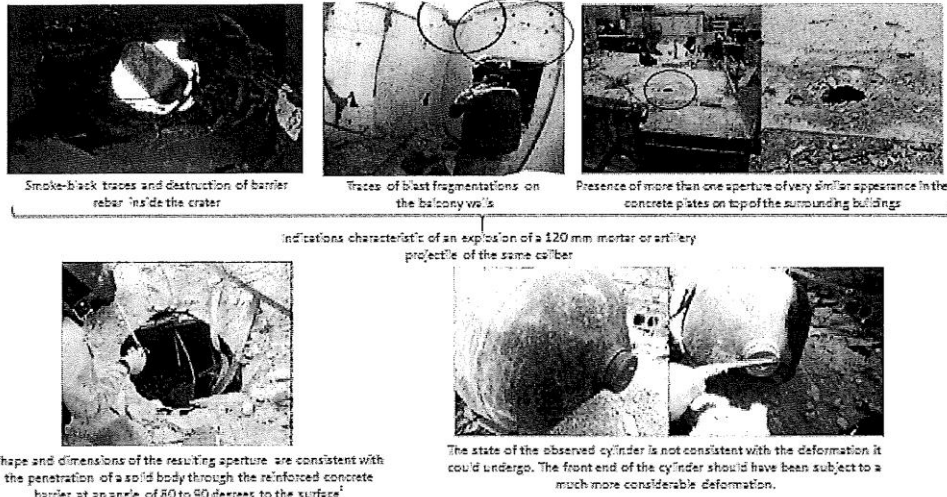
The state of the observed cylinder is not consistent with the deformation that a cylinder filled with liquid chlorine could undergo under the above-mentioned conditions of penetration. In such a situation the front end of the cylinder should have been subject to a much more considerable deformation.

When impacting the rooftop, the cylinder was to alter its trajectory and its angle of approach to the barrier, which was not the case judging by the description of the crater in the roof.

The detailed study of the crater in the reinforced concrete barrier (the roof of the building), as well as the presence of smoke-black traces and the destruction of the barrier rebar inside the aperture, are more consistent with an explosion of a 120 mm mortar or an artillery projectile of the same calibre that approached the barrier along the arching trajectory.

This is also evidenced by the traces left by blast fragmentations on the walls of the balcony. The probability of the crater being formed by a mortar/artillery projectile or a similar munition is also supported by the presence of multiple apertures that are very much alike in the concrete plates on the rooftops of surrounding buildings (Figure A.6.3., page 55).

Disproof of the cylinder being dropped from an aircraft at Location 2



(c) The relative dimensions of the crater at Location 4 are not consistent with the relative dimensions of the cylinder found on the bed inside the apartment. The lateral dimensions of the crater supersede the diameter of the cylinder more than twofold, making them contradictory to the estimate and factual results of the piercing effect of solid bodies to the reinforced concrete barrier.

The presence of sticking out rebar elements consisting of soft and loose wires inside the crater is more likely indicative of a crater being widened mechanically from the outside rather than with a crater resulting from a solid body penetration.

The state of the observed cylinder is not consistent with the deformation that a cylinder filled with a liquid (chlorine) could undergo in case of flat penetration. Otherwise a cylinder should have been more flat in its shape, and the stabilizer fins, front-end valve and other add-on devices should have been subject to a considerable deformation, or absent altogether.

The conditions under which the cylinder pierced through the roof terrace into the apartment did not allow for its shifting away from the piercing trajectory without causing collateral damage to furniture, the floor, walls, or window glazing, the testimony of which was not observed.

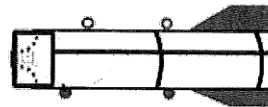
In the case of dropping of a body similar in shape and with an advanced stabilization system from a height of 100 m or above from an aircraft, the observed angles of approach are from 45 to 60 degrees from the surface of a barrier. This fact does not allow us to suggest the possibility of the cylinder falling down flat-wise after being dropped from an aircraft.

Therefore, at locations where the cylinders have been detected, the damage to the roof of the building and to the rooms beneath, or the visible deformations of the bodies of cylinders and their final positions, cannot lend credence to a version of the use of chlorine-filled cylinders delivered by an aircraft.

Disproof of the cylinder being dropped from an aircraft at Location 4



The dimensions of the crater in the roof are 165x106 cm
The presence of sticking out rebar elements consisting of soft and loose wires inside the crater indicates that it was widened intentionally in a mechanical way

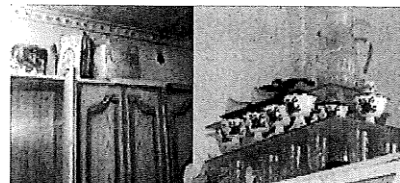


The dimensions of the observed cylinder are 140x35 cm

The lateral dimensions of the crater supersede the diameter of the cylinder more than twofold making them contradictory to the estimate and factual results of the piercing effect of solid bodies to the reinforced concrete barrier



In case of a flat-wise penetration the body of the cylinder should have been more flat in shape. The stabilizer fins, front end valve and other add-on devices should have been subject to a more considerable deformation, or absent.



The penetration of the cylinder into the apartment under the roof did not allow for its shifting away from its piercing trajectory without causing collateral damage to furniture, floor, walls and window glazing.

Conclusion

The Russian Federation does not challenge the findings contained in the FFM report regarding the possible presence of molecular chlorine on the cylinders. However, the parameters, characteristics and exterior of the cylinders, as well as the data obtained from the locations of those incidents, are not consistent with the argument that they were dropped from an aircraft.

The existing facts more likely indicate that there is a high probability that both cylinders were placed at Locations 2 and 4 manually rather than dropped from an aircraft.

Apparently the factual material contained in the report does not allow us to draw a conclusion as to the use of a toxic chemical as a weapon.

On that basis, the Russian Federation insists on the version that there was false evidence and on the staged character of the incident in Douma.