

Mr. Fernando Arias,
Director General OPCW,
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Brendan Whelan



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Dear Mr Arias, as a former expert from the TS, I am writing to inform you of some major concerns I have about the FFM into the alleged use of toxic chemicals in Douma, and I thank you in advance for taking the time to consider the points I have laid out below.

Summary and Background

1. As a member of the fact-finding mission that conducted the investigation of alleged use of chemical weapons in Douma on 7 April 2018, I wish to make known to you what I consider to be serious defects and irregularities in the conduct of the investigation into the said incident.
2. Moreover, I consider it my professional responsibility to express my disagreement with certain content, and what I believe are illogical if not contrived conclusions in the final FFM report released on 1 March and to which I made a significant contribution. The report does not speak for me as a member of the FFM team, and this is a sentiment that has also been aired by most members of the team who were actually on the ground in Douma.
3. A short note on my credentials. I am a PhD chemist with over 30 years' experience with chemical research and OPCW inspections. For the 17 years I worked with the OPCW I have always achieved the highest rating of 'outstanding' in my annual evaluations, invariably scoring highly in terms of professionalism and integrity. I was solely responsible for developing, and providing training to inspectors on the chemistry of chemical weapons and their analysis, having researched and written three books on these subjects for in-house use. Before leaving the Organisation, at my own initiative, I tested, selected and trained five inspectors to take over the course on CW chemistry I had developed, to ensure effective transfer of knowledge of this key subject.
4. My interest therefore has always been the Organisation and my reasons for following this current course of action over the Douma investigation are no different. I am proud and honoured to have served the OPCW for so many years, and I fervently believe it its mission. The conduct of the Douma investigation, however, is not something I share pride in, and the way it has been executed could seriously jeopardise the credibility and reputation of the Organisation. I fear you may not be aware of the details of what went on in the FFM and I am duty-bound to enlighten you on the facts.
5. Overall, the FFM mission to Douma has been characterised by poor planning and execution, an absence of communication between the team leader and the team, a monopolisation of certain information by the team leader, an intolerance for views on

alternative hypotheses, and a general exclusion from the investigative process of most of the FFM team members who had been to Syria for the duration of the field mission.

6. These are not emotive and baseless accusations, but realities that I would be more than happy to substantiate given the opportunity. It should be noted that a report on the lessons learned from the mission to Douma (prepared by OPB and distributed 7 June 2018) highlighted, among other failings, the poor management of the mission, the lack of communication, and the confusing and contradicting instructions from HQ to the team.
7. As background context, my own role in the investigation covered the following:

I took charge of overseeing the scientific planning as well as analysis of scientific data gathered during the investigation. In particular, I was responsible for developing and implementing the sampling and analysis strategy, conducting scientific research on detecting sarin and chlorine in the environment and biological samples, identifying the best types of samples to take and where to collect them, and importantly, rationalising the results of sampling and analysis. In addition, I was involved in the toxicological assessment.

I was assigned to draft the FFM report, and worked independently, with input from some team members, on this task from when I was in Damascus until the interim report was due to be issued on 22 June 2018.

I formed part of the reduced team that attended all the on-site discussions and negotiations with the SAR representatives. I was responsible for keeping records of discussions and writing progress reports and updates for the ODG.

I was the confidentiality officer for the mission.

Interim Report

8. Outlined below are just some of the facts and events that serve to underscore the grave concerns of many of the FFM team members regarding this investigation.
9. When the FFM team returned to The Hague on 3 May, the team members naturally expected instructions on how to proceed with the investigation, as for most it was their first FFM mission. Instructions were never forthcoming, however. I continued working on the draft FFM report in the absence of alternative instructions and since there was no plan that any of the team members, at least those who were in Douma, were aware of.
10. Bizarrely, there were no team meetings, either formal or informal (during the seven-week period after the team returned from Damascus to the time the interim report was issued) to discuss the mission, analyse the data collected, exchange views, or plan on how to proceed with the investigation. There was simply no communication between the 'Douma' team and the team leader. This was particularly concerning given the team leader had left Damascus after three days and had little opportunity for discourse with the team during the on-site deployment.
11. Six of the team members who had conducted the field investigation in Douma were in effect excluded from continuing the investigation. Two members, the Deputy Team Leader

and one other, did get an opportunity to sit in on one review of an earlier draft of the interim report.

12. When the results of the analysis of samples were received from the designated labs on 22 May, the team leader was, as were others, surprised that no nerve agents had been detected, given the symptoms described by witnesses and observed in videos and photos were considered more commensurate with nerve agent poisoning. The conclusion from one of the DLs was that samples had been exposed to a “reactive chlorine-containing chemical” possibly chlorine. This finding didn’t seem to square however with the signs and symptoms of exposure to chlorine.
13. To understand the apparent incongruity, with the authorisation of the then Chief of Cabinet, on 6 June a team that included myself, the Team Leader, Head of Lab and Head of H&S branch travelled to a State Party to consult with specialists in toxicology/pharmacology in the area of chemical weapons to get their expert opinions.
14. The clear and unequivocal opinion from the four experts was that the symptoms presented were [REDACTED] could be identified. This conclusion was relayed back to the former Chief of Cabinet.
15. With this and other key information a final version of the draft interim report was prepared by me then reviewed and agreed among 4-5 team members in mid-June. Most who deployed to Douma were not asked by the ITL to contribute to the preparation or review of the draft of that report. I did, however, informally discuss the executive summary with some of those who had been on site in Douma and they were satisfied with the conclusions.
16. On 21 June I enquired from the team leader about the status of the agreed draft report. He informed me it had come back from the editors with virtually no corrections. I requested an electronic copy from him to file with the working copies (as I was the confidentiality officer).
17. On reviewing the report, I was shocked to see that it had been heavily redacted and substantive and unfounded changes to the conclusions had been incorporated that were contrary to what had previously been agreed.
18. I approached the team leader on the matter and demanded to know by whom and why the report had been so heavily modified without the knowledge of the team, particularly myself who had drafted the original in its entirety. The reply of the team leader was that the ‘first floor’ had requested some minor changes and “this was just the interim report”.
19. In reaction to this very disquieting development and what I considered unacceptable and unethical behaviour, that same night I composed and an e mail which I sent early the following morning (22 June) to the Chief of Cabinet (copied to his deputy and all the team members) denouncing the heavy redaction and altered conclusions of the report. It appeared the report was to be released early that same day, so I considered immediate and affirmative action had to be taken.
20. In the e mail, entitled, “*Grave concern about the ‘redacted’ Douma report*” I raised my concerns about the highly perturbing and ‘unauthorised’ alterations to a report that had already been agreed upon by a selected few of the FFM team. I requested in the e mail that

either the original report be published in its entirety or, if it was going to be released in its redacted and modified format, to “respectfully request to attach my differing observations, in the spirit of paragraph 62 of Part II of the VA of the CWC”.

21. That same morning the Chief of Cabinet summoned the available members of the FFM team to an urgent meeting and instructed the team to work together to come to a unified agreement on the report and to take whatever time was needed to do so. The Director General was, according to the Chief of Cabinet, informed of my e mail and instructed that the imminent release of the interim report (due within hours) be postponed.
22. Following the CoCs instructions a meeting was then held between the team leader and the team members who were in the HQ at the time. For some this had been the first time to meet with other members of the team or the team leader since returning from Damascus seven weeks earlier. The meeting resulted in little clarification on what was to be the way forward. I proposed to the ITL that he should at least draw up a written plan so that everyone would know their respective tasks.
23. After several days the ITL sent a Powerpoint presentation (entitled Summer Activities Plan) to selected team members on broad areas of responsibility for some individuals, but still without a clear strategy for moving forward. Quite astonishingly however, most of the ‘Douma’ team were not assigned any tasks, and the team continued to be dominated by team members who had been to Country X.
24. Nominally I continued to be part of the team, but in reality I was now side-lined from any further meaningful contribution to the investigation. I was no longer in charge of report writing and my responsibility for sampling and analysis issues was transferred to a member of the FFM Alpha ‘core team’. In effect I was being castigated for taking a stand on an issue I felt morally obliged to do.
25. I did have an opportunity to sit in on the review of the final draft of the interim report which was essentially the same as the redacted report whose release had been held off two weeks earlier because of my intervention.
26. I insisted on key changes being made to this latest version before I could agree with it being issued, particularly in relation to the conclusions. This was despite the fact that key information was still being omitted. Nonetheless, I accepted to agree to the report if there were no factually incorrect statements or conclusions contained in it.
27. I argued for two key changes to the report and which the reviewers agreed on:
 - a. As a result of research I had been conducting I discovered that the “chlorinated organic chemicals” identified in many of the samples from Douma could be present in the background environment as a result of anthropogenic activity and in some cases as natural background. This finding raised serious doubts about the confidence in chlorine gas being present at the site of incident. For this reason, the statement that “*samples had been exposed to a reactive chlorine-containing chemical, possibly chlorine*” was not necessarily true and had to be changed to the more factually correct and scientifically defensible “*various chlorinated organic chemicals were found in samples...*” This modification was agreed and reflects what actually appeared in the Interim Report.

- b. Many of the “chlorinated organic chemicals” found in the samples were reported to be present at levels of parts [REDACTED]. These are sub-trace levels, so low in fact that they are at the limits of detection and below what is often present in the environment. For example, the “smoking gun” chemical 2,4,6- trichlorophenol, disingenuously reported by the FFM team as an indicator of exposure to chlorine gas, can be present in drinking water at levels above those found in the samples from Douma. (See for example, WHO Guidelines, WHO/SDE/WSH/03.04/47, Chlorophenols in Drinking-water).

For this reason, I argued that the levels at which these compounds were present in samples was a critical finding by the designated lab that should be included to put the results in perspective (as it was in the original report which had been heavily redacted two weeks earlier). All the report reviewers, including the team leader, accepted the argument and the quantitative levels of chlorinated organic chemicals were incorporated into the draft report.

28. The interim report was eventually issued on 6 July. However, some hours before it was to be released, there were again attempts, from unknown actors, to modify the language of the report in a way that would hint at unfounded conclusions. I and another key team member successfully stood steadfast against these changes. Vital information, however, relating to the quantitative levels of chlorinated compounds in the samples were, despite being agreed for inclusion earlier, unilaterally omitted at the last minute. The justification for the omission was that, the designated lab, at the eleventh hour, reportedly stated it could “no longer stand by the validity of their quantitative measurements”, an explanation I was entirely dis-satisfied with but could not argue against.
29. From the time the interim report was issued on 6 July until my departure from the Organisation on 3 September, I was, despite still being a member of the FFM team, in practise excluded from the Douma investigation.
30. I did, nonetheless, continue researching the scientific literature on detecting chlorine. I proposed to the ITL that I deliver an unclassified lecture on my research and findings in a presentation entitled ‘Detecting Chlorine in the Environment’ to members of the Inspectorate. In this presentation I demonstrated how the chlorinated chemicals that had been detected in samples from Douma (open source information by this time) can, in fact, be commonly present in the environment.
31. Although invited, many of the FFM Alpha core team, including the team leader did not attend the presentation. The Director of Inspectorate did attend as did many inspectors. Also present was an officer from the Office of Confidentiality and Security to ensure no classified information was being divulged, as was the former head of FFM Alpha team.

Final Report

32. Having read in detail the Final FFM Report issued on 1 March 2019, I am very concerned at the way the facts have been misrepresented and highly questionable conclusions drawn. The final report, in grand part, is the original report I had written (the same report that had been heavily redacted in June) but in which key conclusions have since been altered to

contradict those of the original report. This is despite the fact that no substantive or valid new information, particularly with respect to the sampling and analysis results, has been gathered since the interim report was issued.

33. In particular, the wording from the interim report ("*various chlorinated organic chemicals were found in samples...*") has been altered to read, without presenting any additional evidence or reasoning, "*samples taken at both locations had been in contact with one or more substances containing reactive chlorine*". This claim is unsubstantiated and scientifically irresponsible given the information the team possessed and had discussed internally, that chlorinated organic chemicals found in the samples are common in the environment (from chlorine treated water and wood preservatives among others) and crucially, were detected at sub-trace levels.
34. A fact from the investigation is that chlorinated organic chemicals *were* detected in many of the samples collected. These may have been already present in the background environment from anthropogenic sources (which is very possible judging from the scientific literature) or they could indeed be the result of exposure to substances containing reactive chlorine, such as molecular chlorine or house-hold bleach. The FFM however selectively decided it was '*likely [to be the result of exposure to] molecular chlorine*', with no supporting scientific evidence for the choice and based on fallacious reasoning and flawed analytical procedures (i.e. absence of any background analysis. See following paragraphs). It should be noted that the report makes no mention of the fact that members of the White Helmets doused the scene of the alleged incident at Location 2 with fire-fighting water, a common source of chlorinated organic chemicals (See WHO Guidelines for Drinking-water Quality, Volume 1, 2004)
35. Compounding many fundamental failings of the Final Report is the fact that no background samples were analysed to put the detection of chlorine-containing compounds in context. Without measures of background levels, the detection of chlorinated organic compounds and inorganic chloride ion has little value since these chemicals can be present in the environment, as my earlier research showed, but was chosen to be ignored.
36. The FFM team in Douma did collect a background (control) sample at Location 2, precisely for this purpose, but strangely was not analysed by the designated labs, rendering the findings of chlorinated organic compounds in environmental samples moot. This amounts to a fundamental flaw in analytical chemistry and would invalidate any findings in a serious research or investigative undertaking. (Note, with nerve agents, this lack of a control sample is less critical as nerve agents and their decomposition products are not expected in the background environment. Not so with chlorinated compounds)
37. In fact, the report itself even emphasises the importance of analysing control (background) samples because, as stated therein, "*chloride ions and many chlorinated organic derivatives exist in the natural background*" (Annex 4 paragraph 7). Despite this, the background sample collected for this purpose was astonishingly not analysed. Moreover, and equally surprising, this affirmation that many chlorinated organic derivatives exist naturally in the environment, is contradicted in the summary of the report (Paragraph 2.6) where it states "*Based on the levels of chlorinated organic derivatives, detected in several environmental samples...., which are not [emphasis added]naturally present in the*

environment, the FFM concludes that [samples] had been in contact with one or more substances containing reactive chlorine.”

38. Not only did the FFM team not analyse probably the most crucial sample collected, i.e. the background sample, but prioritised the analysis of samples collected in Country X, for which no chain of custody existed, over other samples which had been collected by the FFM team and therefore had full chain of custody.
39. The final report additionally contains (with respect to the original unpublished report) a large section on the engineering studies of the two cylinders and their provenance. As an organic chemist I do not have the technical competence to comment on the damage to the cylinders, the roofs or their provenance. My colleague [REDACTED] an experienced engineer who has an extensive background in this subject does however have the competence. I understand that he also has serious concerns about the reporting of this issue in the Final Report and the way this part of the investigation was conducted.
40. Critical information, like the expert opinions of the toxicologists consulted on 6 June, has, shockingly, been omitted. There is even no record in the report of those consultations, whilst later exchanges with other toxicologists, who seem to have found consistency of the victim's symptoms with the chlorine narrative, are reported. To say that this selective use of expert opinions and facts is disturbing is an understatement. Particularly as it leads to severely biased reporting of the epidemiological study.
41. Numerous other questionable conclusions, facts and observations are contained within the report, which are beyond the scope of this letter.

Closing

42. I am fully aware of the seriousness of the claims I am making, but I stand ready to support them if given that opportunity. In such case I will gladly make myself available to do so. Despite their seriousness, it is, I believe, a simple matter to establish their veracity if so desired.
43. Moreover, should the entire FFM team be given an audience with senior management, and provided there are clear and unequivocal guarantees that team members are permitted to speak freely and without fear of repercussions, a clear picture of the conduct of the investigation into the Douma incident will, I believe, emerge.
44. In the confidence that you would welcome an opportunity to clarify this matter internally within the TS, I look forward to the possibility of offering my perspective. I have no other motives for raising this critical issue than to see due process followed. I have no interest in what the outcome of the investigation is, but only that robust and proper scientific logic and methods be applied with independence and impartiality. This unfortunately has not been the case. The TS has an abundance of talented and experienced people capable of conducting very professional, independent and impartial investigations. They need the framework to do so.

Yours sincerely,

Dr. Brendan Whelan _____

(Former Inspection Team leader and Member of FFM Team for Douma)