OPCW Technical Secretariat

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# NOTE BY THE DIRECTOR-GENERAL

# EVALUATION OF THE RESULTS OF THE FIFTY-SIXTH OFFICIAL OPCW ENVIRONMENTAL PROFICIENCY TEST

1. The Director-General wishes to inform States Parties of the results of the Fifty-Sixth Official OPCW Environmental Proficiency Test, which was conducted by the Technical Secretariat (the Secretariat) from October 2024 to March 2025. The OPCW Laboratory is accredited by the Raad voor Accreditatie (RvA), the Netherlands, to conduct proficiency testing in compliance with the criteria laid down in International Organization for Standardization/International Electrotechnical Commission Standard ISO/IEC 17043. The test was conducted according to the following quality management system documents:

   (a) "Standard Operating Procedure for the Organisation of OPCW Proficiency Tests" (QDOC/LAB/SOP/PT01 (Issue 4, Revision 1, dated 18 April 2024));

   (b) "Work Instruction for the Preparation of Samples for OPCW Proficiency Tests" (QDOC/LAB/WI/PT02 (Issue 4, Revision 0, dated 18 April 2024));

   (c) "Work Instruction for the Evaluation of the Results of OPCW Proficiency Tests" (QDOC/LAB/WI/PT03 (Issue 4, Revision 3, dated 18 April 2024)); and

   (d) "Work Instruction for the Reporting of the Results of the OPCW Proficiency Tests" (QDOC/LAB/WI/PT04 (Issue 3, Revision 4, dated 18 April 2024)).

2. In order to retain their designation, designated laboratories must demonstrate once per calendar year that they have maintained their capabilities in a proficiency test organised by the Secretariat, unless the additional guidelines in decision C-20/DEC.4 (dated 2 December 2015) are applicable.

3. The Defence Science and Technology Laboratory of Porton Down, Salisbury, Wiltshire, United Kingdom of Great Britain and Northern Ireland, prepared the test samples, and the Chemical Analysis Laboratory of the Technological Center of the Army, Brazil, evaluated the results of the Fifty-Sixth Environmental Proficiency Test.

4. Twenty-seven laboratories from 22 States Parties, including the two assisting laboratories, were nominated for participation in the test; one laboratory withdrew before the samples were received.

5. The preliminary evaluation report was discussed at a hybrid meeting, which was held online and at the OPCW Main Building, with Secretariat staff and test participants, on 11 February 2025. The participants were given two weeks to comment on the results, and to inform the Secretariat whether they accepted their performance evaluation.

6. The evaluating laboratory submitted its final evaluation report to the Secretariat on 28 February 2025.

7. The principal results of the Fifty-Sixth Official OPCW Environmental Proficiency Test can be summarised as follows:

   (a) All regular test participants submitted their analytical report within the test period, with the exception of one participant.

   (b) Seven regular participants identified and reported all the spiking chemicals with sufficient analytical data for all of the spiking chemicals and received a performance rating of A.

   (c) Five regular participants identified and reported seven out of the eight spiking chemicals with sufficient data and received a performance rating of B.

   (d) Six regular participants identified and reported a higher number of spiking chemicals than the number of chemicals missed and received a performance rating of C.

   (e) Five regular participants provided sufficient data for the identification of fewer than half of the spiking chemicals and received a performance rating of D.

   (f) One participant did not submit a test report in their allotted test time and received a performance rating of F*.[1]

   (g) Three non-scoring chemicals were reported.

   (h) The sample preparation laboratory submitted its report and was awarded the maximum performance rating of A.

   (i) The evaluating laboratory submitted its report and was awarded the maximum performance rating of A.

   (j) There are nine A's, five B's, six C's, five D's, and one F* in the test scores for the 24 regular participants and the two assisting laboratories.

8. The final results for all of the laboratories participating in the test are presented in the table in the Annex hereto.

9. The participating laboratories are reminded that if they have made any errors or reported false positives or false negatives (arising from a failure to find a spiking chemical or to provide sufficient supporting data for a chemical that is found), they should take immediate remedial action. Before participating in the next test, each such laboratory is required to submit a detailed follow-up report to the Secretariat stating the cause of the problem and any remedial action it has taken. Any such laboratory failing to submit the required report, including details of the remedial action it has taken, will not be permitted to participate in the next proficiency test.

Annex: Results of the Fifty-Sixth Official OPCW Environmental Proficiency Test

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[1] A laboratory will receive a rating of F for reporting a false positive. A performance rating of F* (that is, with an asterisk) indicates that the laboratory did not submit its report on time.

**Annex**

**RESULTS OF THE FIFTY-SIXTH OFFICIAL OPCW ENVIRONMENTAL PROFICIENCY TEST**

| Participant Laboratory Code | No. of Spiking Chemicals Reported[2] | No. of Chemicals Scored | Rating | Comments |
|---|---|---|---|---|
| **Algeria**<br>Institut National de Criminalistique et de Criminologie de la Gendarmerie Nationale (48) | **7** | **7** | **B** | Did not report chemical G. |
| **Belgium**<br>Defence Laboratories (DLD) (20) | **7** | **7** | **B** | Did not report chemical G. |
| **Brazil**<br>Chemical Analysis Laboratory of the Brazilian Navy, Nuclear, Biological, Chemical and Radiological Defense Centre (32) | **6** | **6** | **C** | Did not report chemicals B and G. |
| **Brazil**<br>Laboratório de Análises Químicas (LAQ) - Instituto de Defesa Química, Biológica, Radiológica e Nuclear (IDQBRN) – Centro Tecnológico do Exército (CTEx) | – | – | **A** | Evaluating laboratory |
| **China**<br>Laboratory of Analytical Chemistry, Research Institute of Chemical Defence (RICD) (5) | **8** | **8** | **A** | – |

[2] Spiking chemicals:

A Methylphosphonic acid
B O-Ethyl (1-(diethylamino)ethylidene) phosphoramidic acid
C Thiodiglycol
D Pinacolyl alcohol
E Methylphosphonic acid
F Ethyl methylphosphonic acid
G N,N-Diisopropylethanimidamide
H 2-(N,N-Diisopropylamino)ethanol

| Participant Laboratory Code | No. of Spiking Chemicals Reported[2] | No. of Chemicals Scored | Rating | Comments |
|---|---|---|---|---|
| **Denmark**<br>Danish Emergency Management, Chemical Operations (33) | **4** | **0** | **D** | Did not report chemicals B, D, G, and H. Insufficient data for chemicals A, C, E, and F. |
| **Germany**<br>Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS) (6) | **7** | **7** | **B** | Did not report chemical G. |
| **India**<br>Centre for Analysis of Chemical Toxins, CSIR-Indian Institute of Chemical Technology (24) | **6** | **6** | **C** | Did not report chemicals B and G. |
| **India**<br>Defence Research and Development Establishment (DRDE) (43) | **8** | **8** | **A** | – |
| **India**<br>Institute of Pesticide Formulation Technology (11) | **6** | **6** | **C** | Did not report chemicals B and G. |
| **Japan**<br>Chemical School, Japan Ground Self-Defense Force (10) | **6** | **6** | **C** | Did not report chemicals E and G. |
| **Malaysia**<br>Department of Chemistry, Malaysia (DCM) (45) | – | – | **F*** | Did not submit report in allotted test time. |
| **Malaysia**<br>Science and Technology Research Institute for Defence (STRIDE) (14) | **4** | **2** | **D** | Did not report chemicals B, C, E, and G. Insufficient data for chemicals D and H. |
| **Nigeria**<br>National Agency for Food and Drug Administration and Control (NAFDAC) Central Laboratory (19) | **6** | **1** | **D** | Did not report chemicals B and G. Insufficient data for chemicals A, C, E, F, and H. |
| **Pakistan**<br>Analytical Laboratory, Defense Science and Technology Organisation (22) | **8** | **8** | **A** | – |

| Participant Laboratory Code | No. of Spiking Chemicals Reported[2] | No. of Chemicals Scored | Rating | Comments |
|---|---|---|---|---|
| **Poland**<br>Chemical Laboratory of CBRN Area Control Centre of Polish Armed Forces (9) | **8** | **8** | **A** | – |
| **Republic of Korea**<br>Chemical Analysis Laboratory, 5th Directorate 3rd Research and Development Institute, Agency for Defense Development (ADD) (38) | **7** | **7** | **B** | Did not report chemical G. |
| **Romania**<br>Research and Innovation Center for CBRN Defense and Ecology, Chemical Analysis Laboratory (39) | **5** | **2** | **D** | Did not report chemicals B, G, and H. Insufficient data for chemicals C, E, and F. |
| **Russian Federation**<br>Central Chemical Weapons Destruction Analytical Laboratory of the Federal State Unitary Enterprise, "State Scientific Research Institute of Organic Chemistry and Technology" (FSUE) (49) | **8** | **8** | **A** | – |
| **Russian Federation**<br>Laboratory for Chemical and Analytical Control, Military Research Centre (LCAC)(28) | **8** | **8** | **A** | – |
| **Slovakia**<br>Section of Chemical Laboratories, Military Unit (25) | **6** | **5** | **C** | Did not report chemicals B and G. Insufficient data for chemical D. |
| **South Africa**<br>Protechnik Laboratories (1) | **6** | **5** | **C** | Did not report chemicals B and G. Insufficient data for chemical H. |
| **Spain**<br>Laboratorio de Verificación de Armas Químicas (LAVEMA) (41) | **7** | **7** | **B** | Did not report chemical G. |
| **Sweden**<br>Swedish Defence Research Agency (FOI) (35) | **8** | **8** | **A** | – |

| Participant Laboratory Code | No. of Spiking Chemicals Reported[2] | No. of Chemicals Scored | Rating | Comments |
|---|---|---|---|---|
| **Türkiye**<br>Tubitak Marmara Research Center, CBRN Defence Technologies Research Group (21) | **6** | **1** | **D** | Did not report chemicals B and G. Insufficient data for chemicals A, C, D, E, and H. |
| **United Kingdom of Great Britain and Northern Ireland**<br>Defence Science and Technology Laboratory, Porton Down | – | – | **A** | Sample preparation laboratory |

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