

Performance Monitoring

Table of Contents

1	PURPOSE	2
2	SCOPE.....	2
3	TESTING AREAS AND FREQUENCY	2
4	DOCUMENTATION AND RECORDS	3
5	PERFORMANCE MONITORING EVALUATION	3
5.1	Performance Monitoring Tests	3
5.2	External Proficiency Tests	3
6	INTERLABORATORY AND INTRALABORATORY COMPARISONS.....	4
7	REFERENCES	4
8	REVISION HISTORY	4

Performance Monitoring

1 PURPOSE

This procedure outlines the methods for administering and recording performance monitoring (PM) specific to the Firearms/Toolmarks Discipline (FTD) of the FBI Laboratory. The FTD is composed of personnel from the Firearms/Toolmarks Unit (FTU) and the Scientific & Biometrics Analysis Unit – Toolmark Group (SBAU-TG).

2 SCOPE

This procedure applies to any personnel conducting forensic examinations in the FTD.

3 TESTING AREAS AND FREQUENCY

- A. FTD personnel who perform laboratory activities and/or handle evidence will complete a minimum of one of the following PM methods per calendar year in the area(s) they are qualified and authorized to perform work:
- Proficiency test (PT)
 - Intralaboratory comparison
 - Interlaboratory comparison
 - Observation-based
- B. The following FTD components/parameters, listed on the scope of accreditation, will be monitored and have been approved for use:

Component/Parameter	Test Description
Distance Determination	Gunshot residue distance determination
Physical Comparison	Firearms
Physical Comparison	Toolmarks
Serial Number Restoration	Serial number restoration

- C. The following FTD components/parameters are not offered by an approved test provider; however, PM activities may be conducted as necessary to ensure the inclusion of a representative sample of the components/parameters and equipment/technologies listed on the scope of accreditation are tested.
- Field Sampling
 - Function Evaluation
 - Individual Characteristics Database
 - Qualitative Determination
 - Trajectory Determination

- D. FTD Examiners will participate in external proficiency testing if the test(s) meets the requirements of the [Quality Assurance Manual](#) and the discipline. If an acceptable external test is not available, another PM method will be utilized.
- E. External proficiency tests may be utilized as a performance monitoring method for FTD Physical Scientists/Non-Examiners; however, other PM methods can be utilized.

4 DOCUMENTATION AND RECORDS

- A. PM methods will be administered and distributed using the laboratory information management system (LIMS), as applicable.
 - 1. Each respective FTD component Proficiency Test Representative (PTR) will ensure that PM information is entered into the LIMS.
- B. Each PM participant will be responsible for completing the appropriate examination and/or administrative records for the assigned test to the same extent performed in routine casework.
 - 1. An Examiner will complete a combined Technical and Administrative Review of the records generated by a PM participant not authorized to issue a Laboratory Report.
- C. When applicable, all sample packets will be sealed and returned to the appropriate storage area when completed.
- D. PM records, to include completed external data forms, should be returned to the PTR.
 - 1. Records will be submitted to the PTR one week prior to any manufacturer due dates or as described by the PTR in advance.
 - 2. If applicable, the completed PM results will be submitted to the external test provider.

5 PERFORMANCE MONITORING EVALUATION

The PTR will retain test samples through the evaluation of a PM and, when applicable, the resolution of any non-conformity(ies) associated with that PM.

5.1 Performance Monitoring Tests

- A. After the PM records are submitted to the PTR, the PM records will be evaluated by the appropriate UC and/or FTD Technical Leader (TL) for an inconsistent or a non-consensus result, the PM results will be made available to the PM participant

5.2 External Proficiency Tests

- A. Upon receipt of the individual reports, the PTR and affected Unit Chief(s) and/or FTD TL will conduct a further assessment and evaluation of the PT results. If it is determined the PT results are 'satisfactory,' the evaluation will be recorded in the LIMS. If an inconsistency or non-consensus result is noted, the PTR will follow the procedures in section 10.2.5 of the [Quality Assurance Manual](#).

6 INTERLABORATORY AND INTRALABORATORY COMPARISONS

- A. If an interlaboratory or intralaboratory comparison will utilize a retained external proficiency test sample, it must not have been previously assigned to a proficiency test participant.
 - 1. The PTR will follow the appropriate procedures outlined in section 10.2 of the [Quality Assurance Manual](#).
- B. The PTR will ensure [Performance Monitoring Other Than Proficiency Testing \(7-290a-c\)](#) forms are completed. These forms will be completed and included in each test packet to fulfill the requirements for test preparation and ensure the necessary information is recorded.

7 REFERENCES

Quick Reference Guide – Managing Proficiency Tests in FA 6.4.21.pdf

Quick Reference Guide – Proficiency Test Checklists 6.4.21.pdf

Quick Reference Guide – Performing Proficiency Tests in FA 6.4.21.pdf

8 REVISION HISTORY

Revision	Issue Date	Changes
00	2/18/2022	Drafted with new template requirements. Merged sections from FTD-109-08. Expanded performance monitoring requirements and plan.