**Date:** **NVLAP Lab Code:** Click or tap here to enter text.

**NIST HANDBOOK 150-24 CHECKLIST (ISO/IEC 17025:2017)**

**(Law Enforcement and Corrections Equipment)**

**Instructions to the Assessor:** This checklist addresses specific accreditation criteria prescribed in NIST Handbook 150-24, Law Enforcement and Corrections Equipment. These criteria do not supersede the *Criteria for Accreditation* based on ISO/IEC 17025:2017, which are addressed in the NVLAP General Criteria Checklist. The shaded criteria indicate those clauses where a documented procedure is required.

Place an "X" beside each checklist item that represents a nonconformity. Place a "C" beside each item on which you are commenting for other reasons. Record the nonconformity explanation and/or comment in assessment report created in the assessor portal under the laboratory’s assessment record. Place "OK" beside all other items you observed or verified as compliant at the laboratory.

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| --- | --- | --- | --- | --- | --- |
| **Requirement** | | | **Compliance**  **(OK, X, or C)** | **Management System Reference** | **Objective Evidence** |
| **3** | **Accreditation process** | | | | |
|  | **3.3** | **Onsite assessment** |  |  |  |
|  | **3.3.4** | Laboratory equipment required to perform accredited testing shall be available for assessment and in good working order. This includes environmental and conditioning equipment, testing areas and equipment, and clay management and verification equipment. | Choose an item. |  |  |
|  | **a)** | Although all test methods on the scope or proposed scope of accreditation need not be set up during the onsite assessment, the laboratory shall be prepared to demonstrate selected test methods as requested by the assessor. | Choose an item. |  |  |
|  | **b)** | For those cases where a demonstration is not requested, the laboratory shall be prepared to describe the test method and procedures it would follow and show the actual equipment, fixtures, and arrangements that would be used. | Choose an item. |  |  |
|  | **3.3.5** | Laboratory staff shall be available to answer questions pertaining to the accreditation review. | Choose an item. |  |  |
|  | **3.4** | **Proficiency testing** |  |  |  |
|  | **3.4.2** | When PT programs are available, and when instructed by NVLAP, laboratories shall participate in PT for identified test methods and portions of test methods. | Choose an item. |  |  |
|  | **3.4.3** | Laboratories renewing accreditation shall have satisfactorily participated in all required PT during the previous accreditation period. | Choose an item. |  |  |
|  | **3.4.7** | The PT artifacts or test items shall, like all test items received by the laboratory, be listed or entered into the normal tracking and identification system for control and data recording. PT shall not be contracted to another laboratory. | Choose an item. |  |  |
|  | **3.4.8** | When appropriate, PT data are analyzed using statistical procedures to determine distributions and parameters, such as averages, standard deviations, and outliers. Using the test data from PT, the laboratory shall monitor its own testing performance. Procedures for receiving, analyzing, and monitoring the laboratory’s test results shall be documented in its management system documentation. | Choose an item. |  |  |
|  | **3.4.9** | After notification of unsatisfactory performance, the laboratory shall take corrective action to investigate and resolve nonconformities in a timely manner, according to the requirements of NIST Handbook 150. | Choose an item. |  |  |
|  | **3.4.10** | In no case shall PT artifacts be considered as calibration standards or standard reference materials or be used as substitutes for calibration standards that are traceable to NIST or other national metrology institutes (NMIs). | Choose an item. |  |  |
| **5** | **Structural requirements** | | | | |
|  |  | A laboratory seeking NIJ-Approved Laboratory designation shall meet the additional organizational requirements for independence, domicile, etc., as specified by NIJ. | Choose an item. |  |  |
| **6** | **Resource requirements** | | | | |
|  | **6.2** | **Personnel** |  |  |  |
|  | **6.2.1** | **Personnel records** |  |  |  |
|  |  | The laboratory shall maintain a record of personnel designated to fulfill NVLAP requirements including laboratory manager, technical manager, NVLAP authorized representative, NVLAP approved signatories, and staff responsible for conducting testing. | Choose an item. |  |  |
|  | **6.2.2** | **Specific experience and competence of technical manager** | | |  |
|  |  | The laboratory’s technical manager shall have a combination of knowledge, experience, and training in testing law enforcement and corrections equipment defined on the (proposed) scope of accreditation and shall have the technical competence and supervisory capability to direct the work of professionals and technicians in testing law enforcement and corrections equipment. | Choose an item. |  |  |
|  | **6.2.3** | **Competency reviews** |  |  |  |
|  | **6.2.3.1** | The laboratory shall develop an appropriate list of staff member competencies for each test method. Competencies include various techniques for specific NIJ and ASTM test methods. | Choose an item. |  |  |
|  | **6.2.3.2** | For each staff member, the staff member’s immediate supervisor, or designee, shall conduct an annual assessment of performance competence. | Choose an item. |  |  |
|  | **6.2.3.3** | These annual performance competency reviews shall be documented, dated, signed by the supervisor and employee, retained in the personnel files, and be available for review by the assessor. For the purpose of onsite assessments, a separate personnel folder of information specific to applicable NVLAP requirements may be provided instead of the complete folder, which may contain confidential information not needed for the assessment. | Choose an item. |  |  |
|  | **6.4** | **Equipment** |  |  |  |
|  |  | Proper performance and calibration of measurement, test equipment and reference standards shall be periodically verified as needed using cross-checks and/or working standards. The periodical verification shall be recorded. | Choose an item. |  |  |
|  | **6.6** | **Externally provided products and services** | | |  |
|  | **6.6.1** | An NIJ-approved laboratory may subcontract the conditioning of armor. Ballistics tests and stab tests shall not be subcontracted. | Choose an item. |  |  |
|  | **6.6.2** | The NIJ-approved laboratory is responsible for the work of, and reports from, subcontracted laboratories. The requirements of section 7.1 shall be met. | Choose an item. |  |  |
|  | **6.6.3** | All aspects of subcontracting shall be documented in the laboratory management system, including procedures and instructions for handling and shipping. | Choose an item. |  |  |
| **7** | **Process requirements** | | | | |
|  | **7.1** | **Review of requests, tenders and contracts** | | |  |
|  |  | Contracts for tests that are to be submitted to the CTP shall meet the requirements of the CTP in addition to all technical and NVLAP requirements. | Choose an item. |  |  |
|  | **7.2** | **Selection, verification and validation of methods** | | |  |
|  | **7.2.1** | When a technical standard contains normative references, the laboratory shall have the reference documents readily available where necessary for proper implementation of the standard. | Choose an item. |  |  |
|  | **7.2.2** | The laboratory shall have procedures for modifying all relevant management system documents when new versions of standards or clarifications are published, as appropriate. | Choose an item. |  |  |
|  | **7.2.3** | The laboratory shall review NIJ CTP Administrative Clarifications before beginning a test series and shall implement clarifications, as appropriate. | Choose an item. |  |  |
|  | **7.2.4** | The laboratory may include old and new versions of standards in its management system when multiple versions are included in its scope of accreditation or when required by customers or the NIJ CTP. | Choose an item. |  |  |
|  | **7.3** | **Sampling** |  |  |  |
|  | **7.3.1** | All requirements of ISO/IEC 17025 for sampling apply to subsampling. When a laboratory tests some subset of the test items supplied by the customer, it is subsampling. | Choose an item. |  |  |
|  |  | NOTE ISO/IEC 17000:2020 defines sampling as “selection and or collection of material or data regarding an object of conformity assessment.” |  |  |  |
|  |  | NOTE 1 to entry [from ISO/IEC 17000:2020]: selection may be on the basis of a procedure, an automated system, professional judgement etc. |  |  |  |
|  |  | NOTE 2 to entry [from ISO/IEC 17000:2020]: selection and collection may be performed by the same or different persons or organizations. |  |  |  |
|  | **7.3.2** | When the NIJ standard or a customer contract requires that some, but not all, of the armor samples or items being tested are to be treated differently from the rest of the items, this shall be considered sampling. The laboratory shall have procedures and instructions for selecting the items from the group that are to be tested per the NIJ standard or the customer contract. | Choose an item. |  |  |
|  | **7.4** | **Handling of test or calibration items** | | |  |
|  | **7.4.1** | The laboratory shall inspect incoming samples and materials and the accompanying documentation. This inspection shall be conducted before any testing begins. The laboratory shall ensure that it has received all required materials and documentation. | Choose an item. |  |  |
|  | **7.4.2** | The laboratory shall have procedures for collecting test items or for verifying that provided samples meet its requirements. | Choose an item. |  |  |
|  | **7.4.3** | The laboratory shall record in its own records, and in test reports, the organization that selected the items for testing. | Choose an item. |  |  |
|  | **7.4.4** | When a customer sends test items for special or non-standard testing, the laboratory shall meet the customer requirements. | Choose an item. |  |  |
|  | **7.5** | **Technical records** |  |  |  |
|  | **7.5.1** | The laboratory shall have a system for data capture that ensures error-free logging, transcription to the compliance test report (CTR) and recording of all relevant data and parameters for environmental conditions, test item conditioning, ballistics testing, stab resistance testing, and firearms testing.  Where applicable, this shall include two-person verification of readings and recordings. Spoken readings, (e.g., backface deformation (BFD) measurements) made on the range shall be verified after the readings have been entered in the CTR. | Choose an item. |  |  |
|  | **7.5.2** | Handwriting shall be unambiguously legible. Analog charts shall be fully labeled. Data shall be taken and recorded with adequate resolution. Where appropriate, photographs may be used to document observations. | Choose an item. |  |  |
|  | **7.5.3** | When the results of a critical measurement are not durable, (e.g., the digital display of time or velocity on the chronometer), the laboratory shall have a procedure that ensures the error-free transcription of the information from the instrument to the permanent record. | Choose an item. |  |  |
|  | **7.5.4** | When required for critical measurements (e.g., ballistic-resistant body armor BFD measurements greater than 40 mm), the laboratory shall ensure that two independent measurements are made and recorded. | Choose an item. |  |  |
|  | **7.5.5** | Requirements for roundoff and truncation of the data, as specified in relevant standards, shall be followed. | Choose an item. |  |  |
|  | **7.5.6** | Explanations for nonconformities and anomalies that appear on the tables and plots shall be recorded and kept in the test records. | Choose an item. |  |  |
|  | **7.5.7** | Expected anomalies shall be explained with generic notes, (e.g., the transient in relative humidity when the temperature is changed or the recorded relative humidity data that has no meaning at certain temperatures in the 24-hour cycle). | Choose an item. |  |  |
|  | **7.6** | **Evaluation of measurement uncertainty** | | |  |
|  | **7.6.1** | The management system documentation shall list the important components that substantially affect the measurement uncertainty of the test results for each test method on the (proposed) scope of accreditation. This can be done for groups of similar test methods rather than for each test method. | Choose an item. |  |  |
|  | **7.6.2** | Further, an estimate of the magnitude of identified uncertainty contributions shall be provided. | Choose an item. |  |  |
|  | **7.6.3** | The uncertainty shall be determined and reported if required by the test method, the regulator (CTP), or the customer. | Choose an item. |  |  |
|  |  | NOTE The uncertainty contribution of the important components only need be approximated. At this time, documentation validating the uncertainty contribution is not required. |  |  |  |
|  | **7.8** | **Reporting of results** |  |  |  |
|  | **7.8.1** | **General** |  |  |  |
|  | **7.8.1.1** | CTRs submitted to the CTP for testing shall meet the requirements of the standard, the CTP, and NVLAP. | Choose an item. |  |  |
|  | **7.8.1.2** | Test reports submitted to the CTP for testing to NIJ standards shall meet the requirements of the standard, the CTP, and NVLAP. | Choose an item. |  |  |
|  | **7.8.2** | **Common requirements for reports (test, calibration or sampling)** | | |  |
|  | **7.8.2.1** | Test reports shall clearly reference the test method and edition, including the year published, used for testing. | Choose an item. |  |  |
|  | **7.8.2.2** | The laboratory personnel responsible for report writing and generation shall be available to be interviewed by the assessor during the laboratory’s onsite assessment. | Choose an item. |  |  |
|  | **7.9** | **Complaints** |  |  |  |
|  | **7.9.1** | When a CTR is returned to the laboratory for correction, the laboratory shall treat this as a complaint. | Choose an item. |  |  |
|  | **7.9.2** | Requests from the CTP for additional information concerning test items, tests, and test results shall be considered as potential complaints. | Choose an item. |  |  |
|  | **7.10** | **Nonconforming work** |  |  |  |
|  | **7.10.1** | The laboratory shall follow its documented procedures if it discovers that it has issued a test report that contains errors, including errors in testing, analysis, or reporting. | Choose an item. |  |  |
|  | **7.10.2** | The laboratory shall inform the customer and offer remediation. | Choose an item. |  |  |
|  | **7.10.3** | The laboratory shall fulfill any additional NIJ requirements for control of nonconforming testing. | Choose an item. |  |  |
|  | **7.10.4** | A NVLAP-accredited laboratory that acts as a subcontracted laboratory shall inform the subcontracting laboratory and the CTP if nonconforming work is detected. | Choose an item. |  |  |
| **8** | **Management system requirements** | | | | |
|  | **8.4** | **Control of records (Option A)** |  |  |  |
|  |  | Records shall be kept for a period of at least three years unless a longer period is required by the customer, regulation, or the laboratory’s own procedures. | Choose an item. |  |  |
|  | **8.8** | **Internal audits (Option A)** |  |  |  |
|  | **8.8.1** | The internal audit shall cover compliance with NVLAP, the laboratory’s management system, contractual agreements, and test method requirements. They shall be completed at an interval no greater than eighteen months. A NVLAP onsite assessment is not an internal audit. | Choose an item. |  |  |
|  | **8.8.2** | An applicant laboratory shall conduct at least one complete internal audit, including the test methods of the laboratory’s proposed scope of accreditation, prior to the first onsite assessment. The internal audit report and pertinent records will be reviewed by the NVLAP assessor(s) during the onsite assessment. | Choose an item. |  |  |
|  | **8.9** | **Management reviews (Option A)** | | |  |
|  | **8.9.1** | Periodic reviews of the management system shall reflect adherence to NVLAP requirements and the laboratory’s quality objectives and shall be completed, at a minimum, on an annual basis. | Choose an item. |  |  |
|  | **8.9.2** | An applicant laboratory shall perform at least one complete management review prior to the first onsite assessment. The management review report(s) and pertinent records will be reviewed by the NVLAP assessor(s) before or during the onsite assessment. | Choose an item. |  |  |
|  | **8.9.3** | For accredited laboratories, reports and pertinent records for management reviews conducted since the previous onsite assessment shall be made available for review during the onsite assessment. | Choose an item. |  | Choose an item. |