


	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
	Page 1 of 50	

The following pages present the Specific Requirements for Forensic Facilities Licensed in Maryland. The policies, procedures and activities of organizations performing forensic testing must meet these requirements. Management system documentation and supporting records must be available for the assessor’s review. Requirements (clauses) that include the need for a **written** policy, procedure or arrangement have a thick, black border.

Laboratory Instructions: This checklist must be completed and submitted as part of the application for accreditation in order to help both the laboratory and assessor(s) prepare for the assessment. **Correct completion of this checklist may save a significant amount of assessment time and cost.** Complete the document reference identifiers in the checklist's second column (labeled "Reference") for all requirements within a thick, black border. The appropriate “reference” must identify the document (quality manual, laboratory manual, SOPs, etc) and include a “locator” to facilitate identification of the appropriate portion(s) of the relevant document (page number, section number, etc.) The management system documentation and supporting records must be available for the assessor's review.

A2LA Assessor Instructions: Review the laboratory’s documented management system to verify compliance with the applicable requirements. Assess to verify that the documented management system is indeed implemented as described. Place a tick mark in the yes (Y), no (N), or not applicable (NA) space for each checklist item. Please note that for all N/A indications, you must document the reason why this requirement is N/A in the comments section. Record comments related to any requirement on the space provided. Record comments related to tests on separate sheets and/or on the Test Method Matrix. All deficiencies must be identified and explained in the assessor deficiency report. Assess the laboratory’s technical competence to perform specific tests or specific types of tests. Please also complete the separate *C104 – General Checklist: Reference to A2LA Accredited Status-A2LA Advertising Policy*, *C106 – General Checklist: Proficiency Testing for ISO/IEC 17025 Laboratories*, and *C113 - Specific Checklist - A2LA Policy on Measurement Traceability for Life Sciences Testing and Forensic Conformity Assessment Bodies* checklists. The laboratories themselves are not required to complete C104, C106, C113 prior to the assessment. IMPORTANT NOTE: An asterisk (*) in the comments section indicates that the assessor must document the specific traceable objective evidence reviewed in association with that requirement. Objective evidence information is mandatory for those clauses.

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
	Page 2 of 50	

To the best of my knowledge, all organization document references below, as well as actual practice, have been assessed for compliance to the relevant clauses of this document. I hereby attest that all 'Yes' marked compliance clauses, whether initialed or not, meet the aforementioned requirements. Any areas of noncompliance have been fully described in the Assessor Deficiency Report.

Master Code:		Assessment ID:	
Assessor:		Assessor Signature & Date:	

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			
		Compliance			Comments
		Y	N	NA	
A4.0 Management Requirements					
A4.1 Organization					
A4.1.1 Each forensic organization shall develop and maintain an organizational chart of all employees.					
A4.1.2 Facilities performing postmortem forensic toxicology shall have:					
a) A record of sample signatures and initials of all employees handling specimens and performing analytical work.					*
A4.1.3 The forensic organization shall establish and maintain a written ethics and data integrity policy that includes:					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**


Page 4 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
a) An employee’s responsibility to report any activity or behavior by any other employee, subcontractor, or vendor that the employee has reason to believe violates applicable laws, rules, and regulations or the forensic laboratory’s ethics and data integrity policy.					
b) The disciplinary action an employee will be subject to if the employee <ul style="list-style-type: none"> Makes or produces a report that the employee knows to be false or misleading; 					
<ul style="list-style-type: none"> Is found falsifying, short-cutting, camouflaging, or misrepresenting any information or facts about forensic analysis procedure, result, reports, or data management; or 					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Otherwise engages in conduct or behavior that violates the laboratory’s ethics and data integrity policy or laboratory policy and procedure. 					
c) Procedures for reporting, handling and investigating complaints of unethical conduct and violations or suspected violations of the forensic laboratory’s ethics and data integrity policy.					
d) Requirements for employs to: <ul style="list-style-type: none"> Act impartially and not give preferential treatment to any person; 					
<ul style="list-style-type: none"> Exhibit exemplary conduct and use honest efforts in the performance of duties and responsibilities; 					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Perform a forensic analysis in a manner that is independent of internal and external influences, is objective and assures that results are accurate, precise, and of known and documented quality; and 					
<ul style="list-style-type: none"> Understand the serious implications and consequences of unethical conduct, intent to defraud or any impropriety in performing forensic analysis and zero tolerance policy regarding an employee who engages in any form of conduct or behavior that is a violation of the ethics and data integrity policy or laboratory policy and procedure. 					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
e) Requirements that prohibit an employee from: <ul style="list-style-type: none"> • Soliciting or accepting any gift of goods or services or other benefit of value from a person or entity seeking action from or doing business with the laboratory or whose interests may be substantially affected by the performance or nonperformance of the employee’s duties and responsibilities; 					
<ul style="list-style-type: none"> • Holding a financial or personal interest that conflicts with the conscientious and ethical performance of duties and responsibilities; 					
<ul style="list-style-type: none"> • Engaging in a transaction allowing the improper use of confidential information to further a private interest; 					

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
	Page 8 of 50	

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Conducting an action that violates the standards and requirements set forth in the Code of Maryland Regulations (COMAR) Title 10, Subtitle 51 Forensic Laboratories and the laboratory's quality management system; and 					
<ul style="list-style-type: none"> Engaging in outside employment or activities that conflict with the conscientious and ethical performance of duties and responsibilities. 					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<p>A4.1.4 The laboratory shall have a policy that ensures that an employee who in good faith reports to the Secretary of the Maryland Department of Health and Mental Hygiene or the Maryland Department of Health and Mental Hygiene an issue related to data integrity or unethical or fraudulent conduct will not be subject to any form of discrimination or retaliation. Additionally, the policy shall ensure that employees who agree to cooperate with an investigation of the laboratory are not subject to any form of discrimination or retaliation.</p>					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 10 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A4.1.5 The laboratory shall post the document developed by the Secretary of the Maryland Department of Health and Mental Hygiene and approved by the Department informing employees of a forensic laboratory of the procedures to report instances of noncompliance or other violations of the standards and requirements set forth in (COMAR) Title 10, Subtitle 51 Forensic Laboratories or Health-General Article, Title 17, Subtitle 2A, Annotated Code of Maryland. The document shall be posted in a conspicuous place visible to all forensic laboratory employees.					
A4.2 Quality Management System					
A4.2.1 The organization shall appoint a member of staff as laboratory director who is responsible for the overall operation and administration of the laboratory.					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A4.2.2 The laboratory director shall participate in and actively oversee the planning, organization, direction, and review of all laboratory operations and shall be accessible to the forensic laboratory employees to provide onsite, telephonic, or electronic consultation as needed.					
A4.2.3 The laboratory director shall have the authority to initiate, suspend and resume forensic analysis operations for the laboratory and an individual analyst or examiner.					
A4.2.4 The organization shall have a technical leader(s) who is available as needed to provide technical and scientific oversight and assistance and accessible to employees to provide on-site, telephonic, or electronic consultation.					
A4.3 Document Control					
A4.3.1 All technical procedures shall be reviewed annually by the laboratory director or the director’s designee and this review shall be documented.					*



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 12 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A4.3.2 All discontinued technical procedures shall include the date of discontinuance and written or electronic signature of the laboratory director or the director's designee on the date the document is discontinued.					
A4.3.3 All technical procedures shall be approved and signed by the director or the director's designee.					
A4.3.4 The laboratory's safety policy and procedure(s) shall be reviewed annually.					
4.5 Subcontracting of tests and calibrations					
A4.5.1 When seeking to subcontract work for testing offered or performed in the State of Maryland, the laboratory shall:					
a) Use subcontractors that are licensed as a forensic laboratory in the State, regardless of location, unless a waiver has been obtained for a rare or unique test as required by COMAR 10.51.03.01A(4);					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 13 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
b) Ensure that subcontractors issue reports only to the forensic laboratory that ordered the testing; and					
c) Ensure that all remaining evidence is returned to the forensic laboratory.					
A4.8 Complaints					
A4.8.1 Records of complaints shall include:					*
a) Name and organization of complainant, if applicable;					
b) Date of complaint;					
c) Details of complaint;					
d) Corrective action and resolution; and					
e) Notification of the complainant as to the resolution of the complaint.					
A4.8.2 The laboratory director shall be notified of complaints made to the laboratory.					
A4.13 Control of Records					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			
		Compliance			Comments
		Y	N	NA	
A4.13.1 A licensee shall establish and follow a procedure to make discrepancy logs, contamination records, and test results available to the public within 30 days of a written request.					
A4.13.2 A contamination record shall include the following information:					*
a) Unique case identifier;					
b) Encoded sample identification;					
c) Description of results; and					
d) Identifiers that led to an incident report					
A4.13.3 The laboratory shall have documented procedures to ensure that it maintains a coordinated record or case file relating to each case under investigation. These procedures shall include:					*



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 15 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
a) A requirement that permanent ink be used in all cases. The laboratory may allow exceptions (e.g. electronic record keeping, situations where the use of ink would affect the test result or would be impracticable), but only where clearly identified in the quality manual;					
b) A requirement that all administrative documents be identified with a unique identifier and signed or initialed by the individual who prepared or received the document; and					
c) A requirement that each case file be retained for a minimum of 10 years after the case is officially closed.					
A4.13.4 Where technical records encompass both sides of a page, each side shall be considered a separate page.					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A4.13.5 If an individual in addition to the examiner or analyst interprets or reports the results; both individuals initial or electronically sign each page of the examination documents.					
A4.13.6 Where electronic signatures are used, the laboratory shall enact security protocols to control their use.					
A4.13.7 Where abbreviations and symbols are used, the forensic organization shall develop procedures to control their use.					
A4.13.8 Technical records for postmortem toxicology analyses must include:					*
a) A description of the specimen condition prior to testing; and					
b) A description of the specimen type.					
A4.14 Internal Audits					
A4.14.1 Each forensic organization shall conduct and document an internal audit in accordance with ISO/IEC 17025 (2005) section 4.14 annually.					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 17 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			
		Compliance			Comments
		Y	N	NA	
A4.14.2 Each annual internal audit shall be documented and shall identify non-conformances, if any, and the corrective action taken to address the non-conformance.					*
A4.14.3 Each annual internal audit shall be conducted in each discipline in which the laboratory performs forensic analyses.					
A4.14.4 The quality assurance manager shall select, train and evaluate internal auditors.					
A5.0 Technical Requirements					
A5.2 Personnel					
A5.2.1 The laboratory director and technical leader shall authorize specific personnel to conduct independent casework in each type of testing assigned. The laboratory shall maintain records of the relevant authorization(s) of all personnel, including contracted personnel.					*
A5.2.2 The forensic facility shall have a documented training program that includes:					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 18 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
a) Ethics and data integrity;					
b) Criminal and civil law procedures; and					
c) Moot court training.					
A5.2.3 The laboratory shall provide ethics and data integrity training to each new employee and on an annual basis for all current employees. At completion of training, each employee shall sign an ethics and data integrity agreement certifying that the employee has read, understands, and will follow the ethics and data integrity policy.					
A5.2.4 The laboratory shall verify the background and education of all employees by performing a background investigation and reviewing an original or certified copy of the individual's college or university transcript.					
A5.2.5 All employees shall be tested for abuse of controlled dangerous substances and undergo polygraph examination, if available.					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.2.6 The laboratory shall specify in writing the duties and responsibilities of each consultant, technical leader and individual engaged in the performance of pre-analytic, analytic and post-analytic phases of a forensic analysis and shall include:					
<ul style="list-style-type: none"> The tests, examinations and procedures each individual is authorized to perform; 					
<ul style="list-style-type: none"> The competencies required to perform each test, examination and procedure; 					
<ul style="list-style-type: none"> Whether supervision is required for specimen and sample processing, forensic analysis performance, or result reporting; and 					
<ul style="list-style-type: none"> If review by a technical leader or director is required before reporting a forensic analysis result. 					




A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 20 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.2.7 The laboratory director (as identified in A4.2.1) shall:					
<ul style="list-style-type: none"> Hold an earned master’s or doctoral degree from an accredited institution in forensic science, a natural science such as chemistry, physics or biology or a subspecialty of a natural science such as organic chemistry, biochemistry or molecular biology; and 					
<ul style="list-style-type: none"> Have at least 3 years of documented forensic laboratory experience and two years of managerial or supervisory experience. 					

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
	Page 21 of 50	

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
Those individuals who were performing the function of a forensic laboratory director on or before December 31, 2011 may be deemed by management as meeting the above qualifications. A deemed individual must acquire the above listed qualifications by December 31, 2018**.					
A5.2.8 The quality assurance manager, however named, shall:					
<ul style="list-style-type: none"> • Hold an earned baccalaureate or advanced degree from an accredited institution in forensic science, a natural science such as chemistry, physics or biology or a subspecialty of a natural science such as organic chemistry, biochemistry or molecular biology; and 					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 22 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Complete a training program as determined by the laboratory director. 					
<p>Those individuals who were performing the function of a forensic laboratory quality manager on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of quality manager. A deemed individual must acquire the above listed qualifications by December 31, 2018**.</p>					
<p>A5.2.9 The technical leader, however named, shall:</p>					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> • Hold an earned baccalaureate or advanced degree from an accredited institution in forensic science, a natural science such as chemistry, physics or biology or a subspecialty of a natural science such as organic chemistry, biochemistry or molecular biology; and 					
<ul style="list-style-type: none"> • Have documented post-degree experience in the forensic discipline or sub-discipline in which the individual will be a technical leader as identified below: <ul style="list-style-type: none"> ○ 4 years of experience with a baccalaureate degree; ○ 3 years of experience with a master’s degree; or ○ 2 years of experience with a doctoral degree. 					



A2LA


**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 24 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
All disciplines except Biology-DNA and forensic toxicology: The director may establish alternate qualifications for a technical leader if the individual has 9 or more years of experience and is able to demonstrate competency under the laboratory's competency procedures in the forensic discipline or sub-discipline in which the individual will be a technical leader.					
All disciplines except Biology-DNA: Those individuals who were performing the function of a forensic laboratory technical leader on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of technical leader. A deemed individual must acquire the above listed qualifications by December 31, 2018**.					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
	Page 25 of 50	

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.2.10 In addition to requirements listed in section A5.2.6, the forensic toxicology technical leader shall meet the requirements of and be certified under Code of Maryland Regulations (COMAR) 10.10.09.					
A5.2.11 The forensic biology-DNA technical leader shall meet the employee qualifications for a technical leader and be authorized to carry out the duties and responsibilities of a technical leader, as set forth in Quality Assurance Standards for Forensic DNA Testing Laboratories ¹ .					
A5.2.12 Personnel performing forensic analysis in the areas of Toxicology and Trace Analysis:					
<ul style="list-style-type: none"> Hold an earned baccalaureate or advanced degree in forensic science, a natural science or a closely related field of science; and 					

¹ A copy of the Quality Assurance Standards for Forensic DNA Testing Laboratories may be found on the FBI website at: <http://www.fbi.gov/about-us/lab/codis>

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Have successfully completed a training program in forensic toxicology or forensic analysis of trace evidence. 					
An individual whose degree is in a field other than forensic science, a natural science, or a closely related field, may meet the educational requirements, as determined by the director and technical leader, if the individual has:					
<ul style="list-style-type: none"> Successfully completed 12 or more semester or credit hours of course work in biology, physics, or chemistry; and 					
<ul style="list-style-type: none"> Successfully completed a training program in forensic toxicology or forensic analysis of trace evidence. 					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 27 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
Those individuals who were performing the function of a forensic analyst in the areas of toxicology or trace analysis on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of a forensic analyst. A deemed individual must acquire the above listed qualifications by December 31, 2018**.					
A5.2.13 Personnel performing forensic analysis in the area of Controlled Dangerous Substances shall meet the requirements of and be certified under Code of Maryland Regulations (COMAR) 10.10.09.					
A5.2.14 Personnel performing forensic analysis in the area of Biology (not DNA) shall:					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 28 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Hold an earned baccalaureate or advanced degree in forensic science, a natural science or a closely related field of science; and 					
<ul style="list-style-type: none"> Have successfully completed a training program in the biology discipline. 					
<p>An individual whose degree is in a field other than forensic science, a natural science, or a closely related field, may meet the educational requirements, as determined by the director and technical leader, if the individual has:</p>					
<ul style="list-style-type: none"> Successfully completed 12 or more semester or credit hours of course work in biology, physics, or chemistry; and 					
<ul style="list-style-type: none"> Successfully completed at least 2 years of training in the category of forensic analysis performed for the identification and evaluation of evidence in criminal matters. 					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 29 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
Those individuals who were performing the function of a forensic analyst in the area of Biology (not DNA) on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of a forensic analyst. A deemed individual must acquire the above listed qualifications by December 31, 2018**.					
A5.2.15 Personnel performing forensic analysis in the area of Biology-DNA shall meet the FBI standards for performing DNA analysis as set forth in the Quality Assurance Standards for Forensic DNA Testing Laboratories ² .					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06

² A copy of the Quality Assurance Standards for Forensic DNA Testing Laboratories may be found on the FBI website at: <http://www.fbi.gov/about-us/lab/codis>



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 30 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.2.16 Personnel performing forensic analysis in the area of Firearms and Toolmarks shall hold an earned baccalaureate or advanced degree in forensic science, biological or physical science, criminal justice, law enforcement or a related field or have successfully completed a training program in the fields of firearms, processing or examination of forensic evidence and laboratory testing of materials.					
Those individuals who were performing the function of a forensic analyst in the area of firearms and toolmarks on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of a forensic analyst. A deemed individual must acquire the above listed qualifications by December 31, 2018**.					
A5.2.17 Personnel performing forensic analysis in the area of Latent Prints shall:					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 31 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> • Possess a high school diploma or equivalent; and 					
<ul style="list-style-type: none"> • Have successfully completed a training program to include: <ul style="list-style-type: none"> ○ 1 year performing duties related to law enforcement activities or forensic laboratory services; and ○ 1 year performing fingerprint classification or latent examinations. 					
<p>Those individuals who were performing the function of a forensic analyst in the area of latent prints on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of a forensic analyst. A deemed individual must acquire the above listed qualifications by December 31, 2018**.</p>					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.2.18 Personnel performing forensic analysis in the area of Questioned Documents shall:					
<ul style="list-style-type: none"> Hold an earned baccalaureate or advanced degree in forensic science, a natural science or a closely related field of science; 					
<ul style="list-style-type: none"> Have successfully completed a training program in the field of forensic document examination; and 					
<ul style="list-style-type: none"> Have at least 1 year of experience performing forensic analyses for the identification and evaluation of evidence in criminal matters. 					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 33 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
Those individuals who were performing the function of a forensic analyst in the area of questioned documents on or before December 31, 2011 may be deemed by the director in writing as meeting the above qualifications and fulfilling the duties and responsibilities of a forensic analyst. A deemed individual must acquire the above listed qualifications by December 31, 2018**.					
A5.2.19 An individual may serve in one or more positions in the laboratory if the individual meets the qualifications for and fulfills the responsibilities of the position. An individual's duties and responsibilities shall be delegated in writing.					
A5.3 Accommodation and Environmental Conditions					
A5.3.1 The forensic facility shall have a fire detection system.					

** Sunset Policy published in Code of Maryland Regulations (COMAR) 10.51.06



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 34 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.3.2 Operational and storage areas of the facility that require controlled or limited access shall be protected by a locked system.					
A5.3.3 The distribution of all keys, magnetic cards, and entry devices, if applicable, shall be documented and authorized by the director.					*
A5.3.4 The laboratory shall have safety devices and equipment available and in close proximity to the appropriate areas.					
A5.3.5 The laboratory shall ensure that first aid kits and employees trained in first aid are available.					
A5.4 Methods and Method Validation					
A5.4.1 Screening testing used in postmortem toxicology must be validated for the type of biological specimen being analyzed.					
a) Such validations must include precision studies for any methods that use cut-off values for analyte concentrations.					
A5.4.2 When performing postmortem toxicology, the laboratory shall, if possible:					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 35 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
a) Confirm the detection or initial identification of controlled dangerous substances or other toxicants by a second method based on a different chemical principle; and					
b) Ensure that the confirmatory test is more specific than the initial test for the target analyte.					
A5.4.3 When performing immunoassay postmortem toxicology testing the laboratory shall:					
a) Validate each method or procedure for the type of biological specimen being analyzed;					
b) Be able to demonstrate sufficient separation in the response between a negative and positive specimen at the cut-off concentration of the immunoassay; and					
c) Use matrix-matched quality control materials for each batch of specimens analyzed with the immunoassay.					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 36 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.4.4 When using chromatography as part of a postmortem toxicology analysis the laboratory shall:					
a) Analyze calibrators or controls with each batch of specimens for qualitative and quantitative chromatography assays;					
b) Establish an acceptable range for each quantitative quality control material; and					
c) Use a suitable internal reference standard, when available.					
A5.4.5 When using spectrophotometry as part of a postmortem toxicology analysis the laboratory shall maintain cuvettes in good optical condition.					
A5.4.6 When using Mass Spectrometry as part of a postmortem toxicology analysis the laboratory shall:					
a) Establish and adhere to criteria for acceptable mass spectrometric tune;					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 37 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
b) Have written criteria for full scan mass spectrometric identification through library screening; and					
c) Compare ion ratios and retention times between reference standards, calibrators, quality control materials, and case specimens when using selected ion monitoring or selected reaction monitoring.					
A5.4.7 All technical procedures must include, at a minimum:					
a) Sample or specimen preparation, as needed for the method;					
b) Required quality control, standard, and reference material;					
c) Calibration requirements and instructions;					
d) Interfering substances and potential sources of error;					
e) Literature references;					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 38 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
f) Special analytical and safety precautions;					
g) Step-by-step instructions; and					
h) Calculations, if required.					
A5.4.8 Records of method validation shall include:					*
a) Literature references;					
b) Limitations of the method;					
c) Sources of error;					
d) Specificity;					
e) Sensitivity;					
f) Accuracy; and					
g) Reproducibility.					
A5.5 Equipment					
A5.5.1 Records of maintenance performed on equipment and its software shall include the date of performance and signature of the individual performing the maintenance.					*



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 39 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.5.2 Equipment that gives questionable results or is not functioning properly shall be immediately taken out of use and shall be clearly labeled as out of service.					
A5.5.3 Postmortem forensic toxicology					
a) Method calibrations shall include a sufficient number of calibrators and quality control samples in each batch that are consistent with the analysis being performed.					
b) Analyses being performed on specimens with unique matrices shall use appropriate matrix-matched calibrators, when possible, that are prepared and tested concurrently with the specimen.					
c) The laboratory shall have a policy that defines a specimen that has a unique matrix.					
A5.6 Measurement Traceability					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			
		Compliance			Comments
		Y	N	NA	
A5.6.1 Forensic facilities shall ensure that reagents that are not used on a regular basis are tested for reliability before each use. The resulting data shall be recorded.					*
A5.6.2 Where reagent reliability is found to be outside pre-defined criteria, the reagent under test shall be discarded and new reagent prepared and tested for reliability prior to use.					
A5.8 Handling of Test and Calibration Items					
A5.8.1 The forensic facility shall ensure that each item of evidence submitted to the laboratory:					
a) Is permanently marked and includes a unique identifier either on the evidence itself or proximal container of the evidence; and					*



Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
b) Has a documented record that identifies the evidence submitter, date the item was submitted and a description of the item submitted.					*
A5.8.2 The forensic facility shall have procedures for:					
a) Determining workflow and prioritizing work when forensic evidence is submitted for testing; and					
b) Packaging and sealing of evidence to prevent the evidence from being removed, lost, altered, or contaminated.					
A5.8.3 Forensic evidence shall be considered properly sealed only if:					
a) Package seals are initialed or marked by the person sealing the evidence;					
b) The contents cannot readily escape; and					



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**


**Document Revised:
03/05/18**

Page 42 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
c) Entering the container results in obvious damage or alteration to the container or the container's seal.					
A5.8.4 Items stored in an evidence storage area that are not evidence must be clearly marked.					
A5.8.5 The forensic facility shall establish and follow a procedure to document any:					
a) Evidence discrepancies;					
b) Compromise of evidence integrity; or					
c) Lost or misplaced evidence.					
A5.8.6 A forensic laboratory performing postmortem toxicology shall:					
a) Provide to all customers submitting evidence for postmortem toxicology analysis instructions that include:					
• Type and minimum amount of specimen needed for testing;					
• Type and size of specimen container;					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
<ul style="list-style-type: none"> Type and amount of preservative to be added to biological fluids, when applicable; 					
<ul style="list-style-type: none"> Labeling requirements for each specimen container to include type and source, if applicable; 					
<ul style="list-style-type: none"> Packaging, sealing and transport of a specimen; and 					
<ul style="list-style-type: none"> Required medical history information on decedents who may carry a highly infectious disease. 					
b) Ensure that paperwork provided with specimens submitted for postmortem toxicology testing include:					
<ul style="list-style-type: none"> Name of decedent; 					
<ul style="list-style-type: none"> Date of specimen collection; and 					
<ul style="list-style-type: none"> Pertinent history of the case. 					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
c) Develop a policy for the retention, release and disposal of specimens submitted for postmortem toxicology testing.					
d) Have a procedure that defines which postmortem forensic toxicology tests are to be performed on each type of case.					
A5.9 Assuring the Quality of Testing and Calibration Results					
A5.9.1 At a minimum, quality control testing must include the use of:					
a) A positive and negative external control for a qualitative forensic analysis; and					
b) Known levels of external controls for each analyte in a quantitative forensic analysis.					

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
	Page 45 of 50	

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.9.2 Each accredited facility must participate in at least one external proficiency test annually for each forensic discipline in which the facility is licensed by the State of Maryland OHCQ.					
A5.9.3 Those facilities licensed to perform DNA analysis shall meet the proficiency testing requirements set forth in FBI document Quality assurance Standards for DNA Testing Laboratories.					
A5.9.4 External proficiency tests shall be obtained from providers who have been approved by the Maryland Department of Health and Mental Hygiene as set forth in COMAR 10.51.04.03 or have been evaluated by A2LA and added to A2LA document <i>I106 – Available Proficiency Testing Programs</i> .					

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.9.5 Court testimony Evaluations of court testimony shall be documented and reviewed with the examiner/analyst being evaluated. A record of the evaluation and subsequent review shall be maintained.					*
A5.9.6 Technical review The technical review of case records shall be performed on no less than 5 percent of cases and on all cases that include a result of positive comparative analysis. The technical review of postmortem forensic toxicology case records shall include a review of chain of custody, the validity of analytical data and all quality control data.					
A5.9.7 Administrative review The laboratory’s procedure for the administrative review of case records shall specify who may perform the review and shall require that reviews be performed before case reports are issued.					*



A2LA

**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 47 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
A5.10 Reporting the Results					
A5.10.1 The forensic facility shall have a procedure for determining the reasons, criteria, or conditions for when a report is not produced.					
A5.10.2 The forensic facility shall utilize a page numbering system for all reports that includes the total number of pages.					
A5.10.3 Amended reports shall reference the date of the original report, be placed or associated with the original report in the case file and be provided to the customer who ordered the test or analysis.					
A5.10.4 A forensic laboratory performing postmortem toxicology shall:					
a) Establish a policy and procedure for the retention, release and confidentiality of laboratory information in response to requests from customers and other parties; and					




A2LA


**C223a – Specific Checklist: Annex A – Forensic Facilities
Licensed in Maryland**

**Document Revised:
03/05/18**

Page 48 of 50

Requirement	Reference	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
		Compliance			
		Y	N	NA	
b) Identify the extent to which interpretations may be provided with test results and who is authorized to provide interpretations.					
A5.10.5 Postmortem toxicology test reports shall indicate qualitative test results using the following terms:					
a) Positive – if the test result is positive for the presence of the substance tested.					
b) None Detected – if the test results is negative for the presence of the substance tested.					
A5.10.6 Postmortem toxicology preliminary test reports shall clearly indicate that:					
a) Results are unconfirmed and subject to verification;					
b) Testing is incomplete; and					
c) Subsequent results, where appropriate, may affect the final report and interpretation of the report.					

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
		Page 49 of 50

	A2LA	
	C223a – Specific Checklist: Annex A – Forensic Facilities Licensed in Maryland	Document Revised: 03/05/18
		Page 50 of 50

Document Revision History

Date	Description
01/30/2018	<ul style="list-style-type: none"> • Updated Header, Font, and CAB information block. • Replaced reference to <i>C105 – General Checklist A2LA Policy on Metrological Traceability</i> with reference to <i>C113 - Specific Checklist - A2LA Policy on Measurement Traceability for Life Sciences Testing and Forensic Conformity Assessment Bodies</i>.