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5 Structural Requirements

5.1

The Michigan State Police (MSP) is a leader and a partner in providing public safety and law enforcement services for Michigan's citizens. It is the principle investigative agency of the State of Michigan and has the authority and responsibility to investigate crimes (Michigan Compiled Law Chapter 28, Act 59 of 1935). In addition to our role of providing general law enforcement services, the department accepts the unique responsibility for the development and coordination of state-level programs, technologies, and specialized services that enhance enforcement and emergency response capabilities for the entire public safety community. One of these specialized services is forensic science.

5.2

The Michigan State Police Forensic Science Division maintains a management structure that has overall responsibility for the laboratory.

Top management is defined as the Division Director and Assistant Division Directors and may also be referred to as the Executive Leadership Team. Key management is defined as the Division Director, Assistant Division Directors, Laboratory Directors, Technical Leaders, and Unit Supervisors.

The FSD has a Laboratory Director in each laboratory that has the authority to make and enforce decisions affecting the operation of their respective laboratory. Each FSD Laboratory Director's responsibilities and authorities are defined in the Michigan Civil Service Commission's job specifications for the State Police Laboratory Director. The FSD's Quality Manual, Laboratory Operations Manual, and MSP's Official Orders help govern this authority. The Laboratory Operations Manager is responsible for overseeing the laboratory operations and providing resources to ensure efficient laboratory operations.

The FSD has a Technical Leader in each forensic discipline that is responsible for the technical aspects of the discipline. Each FSD Technical Leader's responsibilities and authorities are defined in the Michigan Civil Service Commission's job specifications for the State Police Technical Leader. The Quality Assurance Manager is responsible for overseeing the technical operations and providing resources needed to ensure the required quality of laboratory operations.

5.2.1

The FSD Division Director duties are defined in the Michigan Civil Service Commission's job specifications for the State Bureau Administrator. The FSD Division Director oversees the Laboratory Operations and Quality Assurance Managers. The FSD Division Director has overall authority for the Division operation and quality assurance activities.

5.3

The Forensic Science Division (FSD) of the Michigan State Police is comprised of seven laboratories. The forensic laboratory services included within the Scope of Accreditation include the following disciplines:

- Biology

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- Document Examination
- Fire Debris & Explosives
- Firearms/Toolmarks
- Footwear & Tire
- Friction Ridge
- Materials (Trace)
- Seized Drugs
- Toxicology

The laboratory location and the specific disciplines offered are documented in the Scope of Accreditation.

In addition to the disciplines identified above, the Forensic Science Division offers services in Bloodstain Pattern Analysis and Crime Scenes that are outside of the Scope of Accreditation.

5.4

The FSD provides forensic services to address a contributor's request for the collection and/or examination of evidence. These requests are made using the Request for Laboratory Examination form ([FSD-007](#)) and/or the Crime Scene Response form ([FSD-068](#)), as appropriate. The testing activities are conducted in such a way as to conform to the requirements of the ANAB Forensic Accreditation Program.

The receiving laboratory within the FSD reserves the right to transfer evidence to another accredited laboratory to facilitate testing.

5.4.1

The Michigan State Police (MSP) Forensic Science Division (FSD) conforms to requirements in *PR 1018 ANAB Policy on Use of ANAB Accreditation Symbols and Claims of Accreditation Status*. MSP FSD intends to use the ANAB symbol on the division website in conformance with ANAB policy. Use of the ANAB symbol in any other location shall conform to the same requirements.

5.4.2

The Michigan State Police (MSP) Forensic Science Division (FSD) provides forensic DNA analysis of crime scene evidence for possible upload into the COmBined DNA Index System (CODIS) of the National DNA Index System (NDIS). FSD laboratories providing this service shall conform to the requirements in the NDIS Operational Procedures Manual and in applicable FBI Quality Assurance Standards.

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5.4.3

Statutes, regulations and other legal requirements include:

- MCL 257.625-Michigan compiled law regarding operating while intoxicated and legal limits
 - [http://www.legislature.mi.gov/\(S\(piebr0hiyjgijzapgsno15eb\)\)/mileg.aspx?page=GetObject&objectname=mcl-257-625](http://www.legislature.mi.gov/(S(piebr0hiyjgijzapgsno15eb))/mileg.aspx?page=GetObject&objectname=mcl-257-625)
- Administrative Rule R325.2671 to R325.2677 entitled Alcohol and Drug Testing of Biological and Nonbiological specimens
- DNA Identification Profiling System Act ([ACT 250 of 1990](#))
- DNA Post Conviction Statute ([ACT 175 of 1927 Excerpt 770.16](#))
- Michigan Penal Code ([ACT 328 of 1931 Excerpt 750.239a](#))

5.5

5.5 a)

The Michigan State Police (MSP) Forensic Science Division (FSD) is contained within the Field Support Bureau (see MSP Organizational Chart). The Division is comprised of a Division Director, two Assistant Division Directors, Support Personnel, Technical Leaders and seven regional laboratories each managed by a Laboratory Director. Personnel responsible for testing and quality assurance, including trainees, are adequately supervised (see FSD Organizational Charts), and technical oversight is conducted by persons familiar with the methods, procedures, purpose of each examination, and assessment of the test results.

The FSD has appointed a Health and Safety Officer who has responsibility and authority for ensuring that the Health and Safety Program and Manual are implemented and followed at all laboratories within the FSD.

Key management shall encourage and ensure continued compliance with the ISO/IEC 17025:2017 standards and the ANAB AR 3125 accreditation criteria. They shall also encourage and ensure that analytical staff provides quality work, adheres to current procedures, and identifies and corrects real and potential risks as they become known. Key management shall appoint deputies in their absence ([LOM - 1.18 Absence Notification and Appointment of Deputies-Key Management](#)).

5.5 b)

The Quality Assurance System is comprised of a team of the following management and supervisory personnel with the following responsibilities:

Quality Assurance Manager - An Assistant Forensic Science Division Commander is the Quality Assurance Manager (QAM). The QAM shall be responsible for the following:

- Chair the Forensic Science Division Quality Assurance Team.
- Represent the Forensic Science Division on the Departmental Quality Assurance Team.
- Maintain QA records and other pertinent QA information.
- Coordinate and conduct QA inquiries.

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- Coordinate the establishment of methodologies (protocols) by which candidate technical procedures are evaluated for possible use within Forensic Science Division Laboratories.
- Coordinate proficiency testing.

Technical Leaders -The Technical Leader in each forensic discipline (Biology, Controlled Substances Analysis, Crime Scene Response, Bloodstain Pattern Analysis, Firearms/Tool marks, Latent Prints, Breath Alcohol, Toxicology and Trace/Questioned Documents) is designated a QA Officer that works directly under the QAM as a member of the QA Team, and is responsible for the following:

- Represent their respective disciplines as members of the Forensic Science Division QA Team and assist the Forensic Science Division QAM in his/her responsibilities.
- Monitor the overall QA effort of their discipline, provide advice concerning quality assurance, and keep their respective Laboratory Directors and Unit Supervisors informed concerning QA matters.
- Conduct annual audits in their respective disciplines.
- Identify and facilitate opportunities for employee technical development.

Laboratory Directors and Unit Supervisors - Laboratory Directors and Unit Supervisors also play an important role in the Quality Assurance System. While in terms of organizational structure they work under the purview of a second Assistant Forensic Science Commander (Operations), their QA role is not diminished, and they are responsible for the following:

- Ensure that laboratory staff is both properly trained and monitored in the performance of their duties.
- Provide adequate instrumentation, supply, environment and opportunity for staff to perform casework.
- Monitor and report completed staff proficiency tests to proficiency test providers, Technical Leaders and the QAM.
- Oversee that established quality assurance requirements are met by analytical staff on a consistent day-to-day basis.
- Provide or direct the completion of peer and technical reviews of analytical reports generated at the respective Laboratories.
- Interface with the QAM, Technical Leaders, Supervisors and laboratory staff to facilitate audits, staff training and development, work flow and any other aspect of the Quality Assurance System in general.

Quality Assurance Team Responsibilities - The Quality Assurance Team is responsible for the following:

- Development and review of the Forensic Science Division's QA program.
- Distribute, monitor and report completed staff proficiency tests to proficiency test providers and the QAM.
- Monitor QA activities to determine conformance to policies, procedures and sound practices and make appropriate recommendations for correction and improvement as necessary.
- Seek out and evaluate new ideas and current developments in the fields of quality assurance and quality control, particularly as applied to the forensic sciences, and recommend means for their application wherever appropriate.

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- Review technologies, methodologies, and equipment from a QA standpoint and provide advice to Division management and technical supervisors.
- Evaluate data quality and data trends.

The Quality Assurance Manager will review proposed revisions to the FSD laboratory quality system to ensure that the integrity of the system is maintained when changes are implemented.

The Laboratory Operations Team is comprised of the following personnel with the following responsibilities:

Laboratory Operations Manager- An Assistant Forensic Science Division Commander is the Laboratory Operations Manager. The Laboratory Operations Manager shall be responsible for the following:

- Chair the Forensic Science Division Laboratory Operations Team.
- Coordinate the development of new systems for gathering information and improving productivity through office automation.
- Coordinate the gathering of statistical information for use in improving laboratory efficiency and policy development.
- Evaluates current and future staffing needs and makes recommendations.
- Direct, control, plan, monitor, and facilitate the operational activities of the laboratory system.

Laboratory Directors and Unit Supervisors- In addition to the quality assurance responsibilities of the laboratory system, the Laboratory Directors and Unit Supervisors also play an important role in the Laboratory Operations. They work under the direction of the Assistant Forensic Science Commander (LOM) and are responsible for the following:

- Ensure that laboratory staff is both properly trained and monitored in the performance of their duties.
- Provide adequate instrumentation, supply, environment and opportunity for staff to perform casework.
- Plans with division administration for the growth and expansion of the service according to the needs of the clientele.
- Keeps immediate supervisors informed of activities of the laboratory.
- Involved in the selection of personnel, management of the caseload respective unit/laboratory, provides on-scene investigation crews as needed.
- Works closely with criminal justice agencies and personnel in his/her area to remain flexible and meet the everchanging needs of the client.

Technical Leaders- Technical Leaders, aside from their primary roles within the Quality Assurance Team, play an important role in the Laboratory Operations System. While in terms of organizational structure they work under the purview of a second Assistant Forensic Science Commander (QAM), their Laboratory Operations role is not diminished, and they are responsible for the following:

- Maintain current procedures and training manuals
- Direct developmental research
- Coordinate training
- Coordinates equipment acquisition and maintenance

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Technical Services Unit and Forensic Technician Support- The Technical Services Unit (TSU) is comprised of instrument technicians and information technology support staff. Forensic Technicians are laboratory staff members assisting with casework analyses under the supervision of Unit Supervisors and/or Forensic Scientists. The TSU and Forensic Technicians are responsible for the following:

- Installation, maintenance, calibration, troubleshooting, and repair of electronic, electromechanical, and other highly complex scientific instrumentation.
- Organizes, initiates, collects, and maintains instrument data necessary to maintain the needs of the department.
- Responsible for maintaining a preventative maintenance schedule.
- Prioritizes and schedules repairs on equipment during periods of breakdown.
- Lead regional administrator of various software programs in the Forensic Science Division (FSD).
- Collect and analyze software modification and enhancement requests from the local subject matter experts and helps to ensure that all software applications meet any and all required accreditation standards.
- Monitor and maintain data integrity to ensure ongoing availability of mission critical applications.

Technical Operation Team Responsibilities

- Development and review of the Forensic Science Division's Laboratory Operations program.
- Monitor Laboratory Operations activities to determine effectiveness of meeting customer's expectations related to capacity, turnaround time and service satisfaction and make appropriate recommendations for improvement as necessary.
- Seek out and evaluate new ideas and current developments in the area of laboratory efficiency and effectiveness and recommend improvements wherever appropriate.
- Review technologies, methodologies, and equipment from a Laboratory Operations standpoint and provide advice to Division management and technical supervisors.
- Evaluate Laboratory Operations metrics and data trends.

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5.5 c)



The technical procedures and training manuals for each discipline are maintained in discipline specific Procedures Manuals and discipline specific Training Manuals available on the FSD Documentation Management System.

The Quality Manual is the core of the quality system. It should address each area of the ISO/IEC 17025:2017 standard with a basic statement claiming compliance and how FSD maintains compliance.

The Laboratory Operations Manual and Procedures Manuals describe how all FSD's processes are controlled. Procedures are higher level documents, while work instructions are very specific. Procedures shall be documented to the extent necessary to ensure the consistent application of testing and the validity of results includes analysis and data interpretation to arrive at a result, opinion or interpretation.

Records must be maintained to show compliance of the quality system, for feedback into the quality system, and historical reasons.

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5.6

The Forensic Science Division has personnel who, irrespective of other responsibilities, have the authority and resources needed to carry out their duties, including:

- a) Implementation, maintenance and improvement of the management system;
- b) Identification of deviations from the management system or from the procedures for performing laboratory activities;
- c) Initiation of actions to prevent or minimize such deviations;
- d) Reporting to laboratory management on the performance of the management system and any need for improvement;
- e) Ensuring the effectiveness of laboratory activities.

5.7

5.7 a)

Executive management shall communicate with FSD laboratory personnel regarding the development, implementation and continuous improvement of the management system. Executive management shall advise FSD laboratory personnel of the importance of addressing contributor requests and complying with any relevant statutory and regulatory requirements. All members of the Forensic Science Division are encouraged to identify areas of improvement with respect to meeting the customers' expectations [LOM - 2.2 Risks and Opportunities](#).

5.7 b)

The Forensic Science Division of the Michigan Department of State Police strives to ensure the quality and reliability of the laboratory data produced at its eight regional forensic laboratories. This is achieved through a Quality Management System that incorporates the use of the Quality Manual (QM), the Laboratory Operations Manual (LOM), and Discipline Training and Procedures manuals. These policies and procedures are located on the Internet at <http://www.msp.qualtraxcloud.com>.

Additional quality system documents such as equipment and instrument manuals and records are located at each laboratory. Compliance with the Quality Management System by staff ensures that analyses are performed in accordance with standards of good laboratory practice, are scientifically sound, and are defensible.

All quality system documents are reviewed annually and updated as necessary to continuously improve the effectiveness of the quality system. If conditions or situations having an adverse impact on the quality system are identified, appropriate changes will be made, and/or corrective actions will be implemented.

The Forensic Science Division manages all the documents that comprise its quality system. Internally generated documents are controlled according to [LOM - 2.12 Document Revision and Control](#). All documents posted on the FSD Documentation Management System site shall be the official version of the document. Hard copies of documents are uncontrolled.

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Documents from external sources are also used to form the management system. All controlled documents from external sources are referenced within a controlled space on the FSD Documentation Management System. The description of all controlled documents shall include an issue date, version number, or other indicator to clearly identify the approved document.

Equipment and software manuals that are maintained at the laboratory only for general reference purposes are not required to be controlled. If the equipment or software manual must be referenced to complete casework, it must be controlled and properly included within a controlled space.

Approvals of the documents posted within each space on the FSD Documentation Management System are performed according to LOM - 2.12 Document Revision and Control.

Prior to implementation, all FSD laboratory quality system documents shall be thoroughly reviewed and approved for release by the Quality Assurance Manager (QAM). Policy LOM - 2.12 Document Revision and Control contains provisions for identifying the current version of documents, for distributing quality system documents, and to preclude the use of invalid and/or obsolete documents.

Policy [LOM - 2.12 Document Revision and Control](#) ensures that:

- Current revisions of appropriate practices, procedures and instrumentation manuals shall be available where critical operations are performed;
- Quality system documents shall be periodically reviewed and revised as necessary to comply with applicable requirements;
- Invalid or obsolete documents shall be promptly removed; Archived quality system documents shall be marked as such to preclude their use.

The Forensic Science Division prepared quality system documents are uniquely identified according to the requirements of the [LOM - 2.12 Document Revision and Control](#). This identification includes the document title, date of issue (created date), pagination and revision information (last edited date). The issuing authority is also identified in the document.

Revisions to FSD laboratory prepared quality system documents will be subject to the same review, approval, documentation and issuance requirements as the original document. Changes to policies, practices, procedures and training program manuals shall be described in the revision history portion of the document. Additionally, appropriate personnel shall have access to any information necessary to conduct the review and approve the revision.

Altered or new text is automatically maintained by the FSD Documentation Management System.

The FSD laboratory quality system does not permit the amendment of quality system documents by hand.

Policy [LOM - 2.12 Document Revision and Control](#) applies to documents maintained in computerized systems.