Maine State Police Crime Laboratory

Record Control

1. Scope

The laboratory will control all records related to case analysis including case reports, case notes, and instrumental data. Additionally, quality records such as calibration records, temperature logs, cleaning logs, instrument maintenance records, quality audits, and management system reviews will be controlled.

2. Case Files

2.1 The laboratory will maintain all original case documentation in case files identified by a unique laboratory case number.

2.2 All case files for the current year and the previous year will be stored in designated areas for each section that has worked the particular case. After two years, case files will be moved to a laboratory central storage location for at least an additional two years. The case files will then be relocated pursuant to the current archiving schedule.

2.3 The laboratory case files are stored in the limited access areas of the laboratory. Upon transfer to the state archives records center, the files are stored in a limited access facility.

2.4 Electronic records associated with case files are secure. The laboratory retains electronic information in three ways: instrumental data, the laboratory network and case-related information in LIMS. Instrumental data is located on computers in the limited access areas of the laboratory and accessed by authorized personnel only. Any instrumental or other case-related data located on the laboratory server is secured through user specific log in information.

2.4.1 Computers with storage of electronic data are maintained on secure access areas of the laboratory.

2.4.2 Most instrument computers are secured with a log on and password. In order to ensure that records are secure, staff will not disclose passwords to other individuals, nor will staff use passwords of another individual.

2.5 Any case-related information that is stored electronically only (e.g., no paper copy exists) will be backed-up on a regular basis. Each section is responsible for identifying the data that requires back-ups in section-specific policy.

2.5.1 Whenever possible electronic data will be stored or transferred to the laboratory network drive which is located on a server at the Office of Information Technology and backed-up nightly.

2.5.2 Information retained in LIMS is also located on the laboratory network drive. Upon administrative review, LIMS generates a PDF of the laboratory report, which cannot be altered.

2.5.3 If electronic data cannot be stored on the laboratory network drive, a copy will be maintained on an external media such as CD, DVD, USB drive, etc. The external media will be stored outside of this laboratory at a secure facility.

2.6 Case files will be separated into analytical documentation, administrative documentation, and laboratory reports.

2.7 Administrative Documentation

2.7.1 Administrative documentation will be located on the left side of the case folder.

2.7.2 Administrative documentation may include evidence receipts, assignment notifications, communication logs, e-mails, and police reports.

2.7.3 All administrative documentation must have the laboratory number on each page of the document.

2.7.4 Any significant conversations related to case or evidence examinations will be documented on the communication log. Significant conversations would include releasing of analysis results, changes to analyses requests, requests for additional analyses, etc.

2.8 Analytical Documentation

2.8.1 Analytical documentation will be located on the right side of the case folder, with the exception of electronically retained instrumental data and digital images.

2.8.2 This documentation includes all original case notes, printed/electronic data, printed/electronic photographs, or other material that the examiner uses to reach a conclusion including the use and results of controls and / or standards.

2.8.3 All analytical documentation must support the conclusion so that, in the absence of the scientist/examiner, another competent scientist/examiner or supervisor can evaluate and interpret the data.

2.8.4 Analytical documentation must be permanent in nature.

2.8.5 All analytical documentation must include the laboratory case number, the examiner's signature or initials, and the date the work is performed in the case record.

NOTE: If the examiner uses computer printouts that are generated via a secure log on and the name is printed on the printouts, then no initials or signature are required.

2.8.6 Analytical documentation will only be recorded on the fronts of the pages.

2.8.7 The examiner issuing the report will review, initial and date any examination documentation prepared by another examiner.

2.8.8 Any examiner that verifies the work of another examiner will initial, date and note the result of the verification.

2.8.9 All analytical documentation must include a page number, with the exception of electronic retained instrumental data and digital images. Page numbers will be consecutive in nature to account for all pages in the analytical documentation.

2.8.9.1 If an examiner inadvertently misses numbering a page within the sequence, the examiner may assign the missed number with a letter designation and note the designation on page 1. For example, if the examiner numbers pages 1 through 50 and misses a page between pages 33 and 34, the examiner would number the missed page as 33A and would note on the first page "page 1 of 50 plus 33A."

2.8.9.2 The total number of pages of examination documentation will be noted on the case file review form. If additional examinations are conducted, a new case file review form will be generated which will indicate the updated total number of pages.

2.8.10 All original case notes must be preserved. Original case notes include handwritten notes, printouts of typed notes once signed, and electronic data.

2.8.11 Case notes shall be made contemporaneously with the examinations they document. The examiners will at minimum document the date that examinations begin and the date that the examinations end. The end date will be the date that the examiner signs the case file review form.

2.8.12 All notes must be documented on the approved case note form(s) or worksheet(s). The laboratory does not currently allow for electronic only notes; all notes must be in paper form.

2.8.13 Handwritten notes will be written using ink, not pencil. Color pencil may be used for illustrations if necessary, however no erasures are allowed.

2.8.14 Notes may be typed onto electronic forms or worksheets. Typed notes are considered complete once printed and signed by the examiner. The examiner will initial or sign and date the notes the date they are printed. Once the notes are initialed or signed, they are subject to the same policies as handwritten notes.

2.8.15 All additions or changes to the content of the notes, including interlineations, must be initialed and dated by the person making the change – with the exception of the addition of page numbers, highlighting for clarity, or addition of laboratory numbers.

2.8.16 Notes may not be obliterated or erased. Errors will be corrected using a single line strikeout and the examiner's initials. Overwrites are not allowed.

2.8.17 Any non-contemporaneous changes to the notes must be initialed and dated.

2.8.18 Case notes must contain the testing methods and procedures used during the course of the evidence examination.

2.8.19 When instrumental analyses are conducted, operating parameters shall be recorded. Each section will determine how the operating parameters will be maintained.

2.8.20 Case notes must contain a description of each item of evidence tested which includes the condition of the item and if the item is received damaged or packaged in such a way that the condition will interfere with testing or examinations.

2.8.21 Abbreviations or symbols specific to the laboratory must be defined. Each section is responsible for maintaining an abbreviation document. Common abbreviations such as "etc", "ie", "eg" do not need to be defined.

2.8.22 Analytical documentation must include information on sampling or sample selection which will include the date that the sample was removed, unique identification of the sample tested, a means to identify the location from where the sample was removed, and any relevant environmental conditions.

2.8.22.1 For clarity, ANAB offers the following definitions:

- **Sampling** – Taking part of a substance, material or product for testing in order to reach a conclusion or make an inference about, and report on the whole.

- **Sampling Plan** – A statistically valid approach to determine the number of sub-items that must be tested in order to make an inference about the whole population.

- **Sampling Procedure** – A defined procedure used to collect a sample or samples from the larger whole, to ensure that the value obtained in the analysis is representative of the whole.

- **Sample Selection** – A practice of selecting items to test, or portions of items to tests, based on training, experience and competence. In sample selection, there is no assumption about homogeneity.

2.8.22.2 This laboratory does not process evidence that would require a sampling plan.

2.8.22.3 Each laboratory section will be responsible for defining its own sampling procedure(s) if applicable. The procedure must include either the size of sample to be tested OR the information that must be documented in the notes if the size of sample to be tested is not to be controlled.

2.8.23 Case notes must include any environmental conditions that are required by section policy or method. Each section is responsible for defining specific environmental conditions that are required to perform evidence examinations or conditions that could adversely affect the reliability of the evidence examinations. Examples of environmental conditions are temperature, humidity, vibration, electrical requirements, etc.

2.8.24 Variances from approved methods will be documented in the case notes along with the reason(s) for varying from the method. Any variance from an approved method must be approved by the technical manager of the discipline; the technical manager will initial and date the case record to indicate the approval. If a method allows for examiner discretion, approval does not need to be obtained as long as the methods used are within the scope of the approved document.

2.8.25 When no definitive conclusion can be reached (e.g., results are “inconclusive”) the reason will be clearly documented.

2.8.26 If modification of a previously reported conclusion is necessary due to subsequent testing, reconsideration of test results, or new information, the basis for an

amended conclusion shall be noted in new examination documentation. The original notes will not be altered.

2.8.27 Any discipline-specific case record requirements will be addressed in the policies associated with that discipline.

2.8.28 If an examiner is utilizing an international standard, such as ASTM, then the standard and any modifications or deviations will be noted.

2.8.29 Case notes are considered complete prior to submission for technical or administrative review. Verifications are separate from technical review and may be conducted prior to case completion and submission for technical review.

2.9 Laboratory Reports

2.9.1 The laboratory issues simplified reports specified in a customer agreement. A report is issued for every case received by the laboratory and each piece of evidence analyzed.

2.9.2 Each laboratory report will contain the following information:

- The title of the report will be the type of examination requested.
- The method, at minimum, will be the general examination request.
- Name and address of the laboratory.
- Laboratory number and date of the report on each page of the report.
- The name and address of the agency receiving the report.
- Unique identifier and disposition for each piece of evidence received.
- Date of receipt of each piece of evidence.
- A listing of each item of evidence tested.
- Test results including units of measurement where appropriate.
- Extent of database searches and updates (eg, CODIS, AFIS, NIBIN), if applicable.
- The name(s), function(s) and signature(s) of the person(s) authorizing the results and the laboratory report.
- A clear indication of the end of the report.

2.9.3 The report format is generated by the LIMS system. The format is designed to ensure that the necessary elements of the report are present.

2.9.4 The report will include the results of all analyses. However, if a result is obtained through a series of tests, only the final result needs to be reported. The examiner is not required to report information documented in the case notes which aid in the examiner's recollection or which document the examiner's thought process.

2.9.5 Deviations from, additions to, or exclusions to the existing examination requests may be reported, however at minimum they must be noted in the case record.

2.9.6 A copy of the original laboratory report may be included in the case folder as part of the administrative documentation. When a laboratory report is included, it will be located on the right side of the case folder, for ease of use.

2.9.7 Laboratory reports are treated separate from the analytical documentation and are not subject to the same requirements of page numbering and marking. Each page of the laboratory report will be marked with the laboratory case number.

2.9.8 The examiner must clearly identify in the reports when an opinion or interpretation is being offered in the report. This may be accomplished through the text of the report or by a heading or section designation in the report. For example, the examiner may state "It is the opinion of this examiner..." or a section of the report can be dedicated to reporting findings that are opinion with a heading such as "Opinions and Interpretations", "Conclusions", etc.

2.9.9 When an association is made, the significance of the association shall be communicated clearly and qualified properly in the test report.

2.9.10 When comparative examinations results in the elimination of an individual or object, the test report will clearly communicate the elimination.

2.9.11 When no definitive conclusion can be reached, the test report shall clearly communicate the reasons.

2.9.12 Supplemental reports will be clearly identified as such.

2.9.13 In the event an issued report needs to be changed, amended or re-issued, any change of information shall be clearly identified and, where appropriate, the reason for the change included in the report. Additionally, the new report will be uniquely identified with the new date of issuance.

2.9.14 In the event requests for examination are cancelled, the examiner will issue a report stating that no examinations were conducted on the evidence. "No exam" reports are not required to be technically reviewed. If work was performed on the evidence, but stopped because examination requests were cancelled, the examiner will report out the examinations completed. In rare instances evidence is received in the laboratory where there is no intention of examination, for example securing a vehicle for another agency. In those instances, a report is not required to be generated by the laboratory.

2.9.15 The results of the report are relevant to only the items tested as outlined in the sections of the report titled “Evidence Received” and “Evidence Item Inventory.”

2.9.16 Where applicable, the report will include a statement on the estimated uncertainty of measurement.

2.9.17 Any discipline specific reporting requirements will be addressed in section methods or policies.

2.10 Photographs and Digital Images

2.10.1 When evidence, such as latent prints and impressions, can only be recorded or collected by photography and the impression itself is not recoverable, the photograph of the image will be treated as evidence and itemized in LIMS. Additionally, if digital images are received from the investigating agency and the images are the basis of examination, the images will be treated as evidence and itemized in LIMS. All other digital images will be treated as part of the case record.

2.10.2 Whenever possible, the laboratory number, initials, and date of examination will be documented in the photograph. If the examiner is not able to note the information in the photograph, the digital image will be annotated to include the information or the file name of the digital image will include the lab number, item number, examiner initials and date.

2.10.3 Images generated by the laboratory or submitted by the law enforcement officer and used in the laboratory analysis process may be included in the case folder as analytical documentation. The digital images stored on the network drive will be provided when requested for Discovery.

2.10.4 Photographs or printouts of digital images submitted by the law enforcement officer for informational purposes only are included in the case folder as administrative documentation.

2.10.5 Pages containing digital images utilized for examination documentation in lieu of a sketch, photocopy, or narrative description will be marked and treated as case notes.

2.10.6 Digital images taken or used during the course of evidence examination will be saved electronically on a secure laboratory network drive. These digital images include photographs taken for the purposes of general photo documentation, images received by the laboratory for analysis, images used for comparison /

analysis, images used to document evidence examinations and comparisons, etc. The examiner will retain the images that are relevant to the case documentation and examinations.

2.10.7 An original, unaltered copy of all images will be stored.

2.10.8 When a digital image is used in the process of formulating a scientific conclusion, these images will be stored in an uncompressed or lossless compression format, e.g. TIFF file format, whenever possible.

2.10.9 Adobe Photoshop or other photo processing software may be used during the course of analysis for the purpose of enhancing images. Images may not be altered by adding information that is not present in the original photo; for example, a Latent Print Examiner cannot add ridges to an image.

2.10.9.1 When photo processing occurs, the enhanced image will be saved as a copy of the original.

2.10.10 The examiner may choose to re-name the digital file name to correspond to the item being processed or use the file name assigned by the camera. If the examiner is using a digital image for analysis, the digital file name will be identified in the examiner's case notes.

2.10.11 All digital images used in the examination process will be stored on a secure laboratory network drive under the subfolder assigned to the examiner taking the photographs.

2.10.12 The digital images will be considered part of the case record.

2.11 Release of Results

2.11.1 Results may be released verbally to investigators or the prosecuting agency after the results have been technically reviewed.

2.11.1.1 Latent print and firearms identifications will be verified prior to release, with the exception of ink to ink identifications or exclusions.

2.11.2 Occasionally investigators will request results prior to an examiner completing all examinations on all evidence submitted. In those instances, the technical reviewer will initial and date the results pages for the items being verbally reported.

2.11.3 Written results, through a report, will not be released until the case folder has undergone technical and administrative reviews.

2.11.4 Reports will be distributed through LIMS-Plus Portal via secure log-in and / or an e-mail generated by the Laboratory Office Associate.

2.11.5 A printed copy of the report will be retained in the case file.

3. Quality Records

3.1 Quality records include but are not limited to temperature charts, cleaning charts, reagent logs, equipment performance and verifications, audit reports, management reviews, corrective actions, and preventive actions.

3.2 Each section will be responsible for maintaining and filing the relevant quality records.

3.3 Quality records will be indexed and stored in such a way that they are easy to locate and identify.

3.4 The laboratory may choose to maintain the original paper copy or a scanned version of the paper copy which will be maintained in electronic format. The laboratory will ensure that the electronic format of the record is complete prior to the destruction of the original paper copy.

3.5 Some quality records will exist only electronically in Paradigm or other computer program, such as an instrumental computer.

3.6 Quality records will be maintained pursuant to the current archiving schedules.

3.7 Quality records will be maintained in such a way to prevent loss, degradation or unauthorized changes.

3.8 Paper copies of quality records will be maintained in the secure areas of the laboratory.

3.9 Most electronic quality records will be stored in Paradigm, the laboratory's document control system.

3.9.1 The security settings are set so that only individuals authorized will have access to view, edit, and / or add to the records.

3.9.2 Only the Quality Manager has access to delete the records.

3.9.3 The Paradigm document control system is located on the laboratory's secure server which is backed-up nightly.

3.10 Scanned electronic copies of quality records will be stored in PDF format and saved in Paradigm.

3.11 Electronic quality records may exist on instrumental computers. These records will be maintained with the same security precautions and electronic case related data stored on the computers.

3.12 When necessary, quality records will be maintained confidentially and in such a way as to prevent unauthorized access. Records that require confidentiality include, but are not limited to, corrective action / preventive action documentation, testimony reviews and proficiency testing records.

4. Historical Record Storage

4.1 The laboratory will retain some records for investigative or historical purposes. Examples of these types of records include but are not limited to:

- Cold case homicide laboratory records
- Photographs, negatives and or slides
- Case submittal logs
- Visitor logs
- Video tapes

4.2 These historical records will be retained in a secure storage location, such as an evidence locker, and maintained in a fireproof file cabinet whenever possible.