

Section 5 Validation of Analytical Procedures

- 5.1 The Latent Evidence Section procedures used in forensic analysis will be readily available to analysts of the Latent Evidence Section.
- 5.2 The designated research analyst(s) (Forensic Analyst III) will be responsible for all research of new reagents, test of new equipment and other experimentation conducted within the section. The Special Agent In Charge may implement or discontinue procedures at any given time based on current forensic practices.
- 5.3 Each analyst in the Latent Evidence Section may maintain a personal copy of the section's technical procedures manual. A copy of this manual will be maintained in section conference room. The Special Agent In Charge or designated research analyst will be responsible for distribution of all updates and changes to each of these manuals.
- 5.4 The research analyst conducting research on a specific reagent, processing method or equipment may utilize the techniques and chemicals with the approval of the Special Agent In Charge. Research and validation standards must be conducted while obeying all safety and operating guidelines which are available at the time.
- 5.5 New methodology within the Latent Evidence Section will be researched and validated prior to usage with specific criteria and documentation.
 - 5.5.1 Standards - Each chemical procedure will be tested on various types of applicable substrates to determine the feasibility of developing latent impressions. New equipment tests will also be conducted on various materials and documented.
 - 5.5.2 Consistency - Any significant modification made to the analytical procedures provided will be compared to the original procedure using identical samples. Techniques tested will be compared to previously approved or existing applicable procedures and the results compared.
 - 5.5.3 Time - Various substrates with test impressions will be treated and/or tested at various period of time to compare and document the results. If feasible, various environmental conditions should be included in this

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process.

5.5.4 Documented Reports - Methodology Research Reports will include all chemicals necessary for procedure(s), formulations and/or directions for preparation of solution(s), application techniques, preservation methods, type of sample utilized and how treated, any variances of prior methods, safety considerations and final comparisons, conclusions and results.

5.5.5 All procedures will be supported by all available literature and pertinent documentation, research and test records, control samples and/or photographic reproductions, and safety information. This reference material should be compiled and maintained by the research analyst for review by any member of the forensic science community.

5.5.6 Upon approval and review of procedures by the Special Agent In Charge and safety officer, the research analyst shall develop written procedures on all techniques and equipment.

5.6 Historical and Archive Records

Documentation related to any technical procedure removed from the approved list of procedures will be maintained by the Special Agent In Charge or his/her designee.

Issue Date: _____ Supersedes: _____

Prepared By: _____ Date: _____

Approved By: _____ Date: _____

Originating Unit: _____