Procedure for Sample Accessioning and Processing

1.0 **Purpose –** To provide a procedure for accessioning, handling, processing, and retaining DNA samples from individuals with qualifying convictions or arrests pursuant to Article 13 of Chapter 15A of the North Carolina General Statutes.

2.0 **Scope –** This document applies to personnel (employees and interns) in the DNA Database Section at the State Crime Laboratory.

3.0 **Definitions** – See the DNA Database Section Procedure for DNA Database Operations for definitions applicable to this procedure.

4.0 **Equipment**

- Various laboratory equipment used for these procedures (gloves, biohazard waste containers, S&S paper, multi-barrier pouches, desiccants, heat sealer, staplers, weigh boats, disposable transfer pipettes, coin envelopes, labels, tape, barcodes, biosafety drying hood, biosafety hood, refrigerator, barcode scanners, label printers, etc.)
- Disinfecting solutions: 10 % bleach, 70 % isopropyl alcohol

5.0 **Procedures**

5.1 **Responsibilities**

5.1.1 **DNA Database Forensic Scientists and Temporary Workers** – Maintain workflow and progress in sample processing by performing procedures outlined in this document.

5.1.2 **Criminal Justice Specialists (CJS)** – Assist in maintaining workflow and progress in sample processing by performing procedures outlined in this document.

5.1.3 **Interns** – Assist in maintaining workflow and progress in sample processing by performing procedures outlined in this document and approved by Forensic Scientist Manager as outlined below.

5.1.3.1 Interns shall not use SpecMan unless specifically authorized by the Forensic Scientist Manager. In these cases, a Database employee shall provide supervision.

5.1.3.2 Interns shall not make bloodstains or verify qualifying events.

5.1.3.3 Interns shall not place any telephone calls. This shall be done by Database employees only.

5.2 **Documentation**

5.2.1 See DNA Database Section Procedure for DNA Database Operations for documentation requirements.

5.3 **Aseptic Technique and Contamination Control**

5.3.1 See the DNA Database Procedure for Sample Processing Quality Control.

5.4 **Retrieval of Samples**

5.4.1 Samples shall be retrieved from the Evidence Control Unit at least once daily.

5.4.2 Blood samples from DPS/Division of Adult Correction may be accompanied by a DNA Database Sample Inventory Form.

5.4.3 All liquid blood samples (along with corresponding inventory sheets) shall be removed from packages and placed in the refrigerator until ready to be stained. Buccal samples shall be stored at room temperature until ready to be processed.

5.5 **Accessioning**

5.5.1 Open the DNA sample submission packet and remove the collection card and collector (still within its paper pouch) or blood tube. Samples received with substantial issues (e.g., no card present) shall be set aside for rejection processing and accessioned by a Database employee who will specify rejection reasons and add notes to the specimen record.

5.5.1.1 If the sample is identified as a resubmission, meaning that a rejection letter was included with the sample, search for a specimen record with the status "Resubmit – Pending Receipt" by scanning the barcode on the rejection letter. Verify that the qualifying event for the original specimen and the newly received specimen are the same. The resubmitted sample shall meet the requested criteria outlined in the rejection letter. A rejected sample that has previously been returned to an agency shall not be accepted as a resubmitted sample.

5.5.1.1.1 If the dates are the same, populate the "Resubmit – Pending Receipt" record with the information from the newly received card.

5.5.1.1.2 If the dates are not the same, ensure that the agency is contacted to determine if the sample is truly a resubmission or a new specimen.

5.5.1.2 If a resubmission letter was not included with the sample, search for a sample by scanning the electronic fingerprint number (EFN) barcode, if available, on the collection card.

5.5.1.2.1 If the corresponding specimen record in "New – Pending Receipt" status is found, open the record.

5.5.1.2.2 If the specimen record is not found using the EFN barcode, other identifiers are available for searching prior to creating a new specimen record.

5.5.1.2.3 If the specimen record is not found, create a new specimen record.

5.5.2 Enter the data from the collection card. Record sample receipt information. Scan the front and back of the collection card (and the associated print card, if submitted). Save the file as a .pdf with the specimen number as the file name and attach in the notes of the specimen record. Ensure file size is approximately 100 KB.

NOTE: Per AOC and CCH, Hispanic is not recognized as a designated racial category; therefore, all samples received which are identified as Hispanic shall be entered into the SpecMan system as Caucasian.

5.5.3 Any additional documentation received from the submitting agency shall be scanned, saved as a .pdf, and attached in the notes of the specimen record.

5.5.3.1 Blood Samples

5.5.3.1.1 The sample shall not be accepted if the white transport pouch is damaged, the envelope is unsealed, or the card is missing. Inspect the card to ensure that it is filled out correctly and inspect the blood tube to ensure that the proper information is included. Compare information on the card, blood tube, and inventory form from correctional institutions to verify that the information on the sample and card are consistent. The blood tube must be a purple top tube and must contain the person's name. If other identifiers are present (e.g., Social Security Number (SSN), State Identification Number (SID)), these shall be verified as well.

5.5.3.1.2 For alternate blood draws (e.g., a fingerstick, in which a stain is received versus liquid blood), the S&S paper (or equivalent) or the sample container must contain the donor's name. If other identifiers are present (e.g., Social Security Number (SSN), State Identification Number (SID)), these shall be verified as well.

5.5.3.1.3 A card may be flagged to note minor discrepancies between the identifiers on the blood tube and card (e.g., the spelling of the first/last name or a one-digit difference in the DOB or SSN). The disposition of the sample shall be resolved during the eligibility verification process.

5.5.3.1.4 If there are major discrepancies (e.g., name does not match, wrong secondary identifier) between the identifiers on the blood tube and card or if any pertinent information does not match, the sample shall not be accepted. If the amount or quality of blood is insufficient for testing, the sample shall not be accepted.

5.5.3.1.4.1 Select the rejection reason(s) and add a note to the notes section of the specimen record specifying the reason(s) for the rejection. Place a red dot on the top of the card (indicating that the sample shall be set aside after staining for Rejection Processing.)

5.5.3.1.5 For blood samples, affix one copy of a preprinted specimen number barcode label to the top of the filter paper. Affix the second copy of the preprinted specimen number barcode label with the same specimen number to the area indicated for the NCSCL barcode on the collection card. Scan the specimen barcode from the filter paper

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into the specimen number field. Scan the specimen barcode from the collection card into the card barcode # field.

5.5.3.1.6 Initial and date the card beside the barcode.

5.5.3.1.7 Print two copies of the Specimen Barcode Label and affix one copy to the blood tube and the other to the front of the multi-barrier pouch.

5.5.3.2   Buccal Samples

5.5.3.2.1 The sample shall not be accepted if the collector/white transport pouch/mailing envelope is damaged, the white transport pouch/mailing envelope is unsealed, the card/collector/white transport pouch is missing, or the card is not filled out.

5.5.3.2.1.1 Select the rejection reason(s) for the sample and add a note to the notes section of the specimen record specifying the reason(s) for the rejection. Place a red dot on the top of the card (indicating that the sample shall be set aside for "Rejection Processing" after accessioning is complete.)

5.5.3.2.2 For buccal collectors, scan the collector's white transport pouch barcode into the envelope barcode # field, scan the collection card specimen barcode into the card barcode # field, and scan the collector barcode into the specimen number field. If the three barcodes do not match for a buccal sample or if one of the three barcodes is missing, the sample shall be rejected. In the event the three barcodes are not concordant, the barcode provided on the cheek cell collector shall be used to populate all required fields in SpecMan.

5.5.3.2.2.1 Select the rejection reason(s) for the sample and add a note to the notes section of the specimen record specifying the reason(s) for the rejection. Place a red dot on the top of the card (indicating that the sample shall be set aside for Rejection Processing after accessioning is complete).

5.5.3.2.2.2 In the event that a barcode is missing, the specimen number shall be hand-written in the appropriate place to ensure that the item can be associated with the correct specimen record.

5.5.3.2.3 Initial and date the card in box 2, near the barcode label.

5.5.4   The Forensic Scientist Manager or designee shall be contacted if there is any question as to whether a sample is acceptable. The Forensic Scientist Manager or designee shall

assist in determining the correct course of action (e.g., contacting the submitting agency for additional information, rejection, conferring with legal counsel).

5.5.5   For buccal samples, an associated print card (generated from the agency during arrest) may be accepted in lieu of thumbprints on the DNA Database Collection card. If the fingerprints are not present, the sample is still acceptable and shall be tested.

5.5.6   For samples from correctional institutions, if all the sample information that appears on the inventory form is correct, initial the top of the form and place the form in a storage location within the DNA Database Section. If not, a corrected inventory form shall be requested from the agency.

5.5.7   If the card has all required information present, select "Received" as the specimen status and save the record but do not close it. If the card is missing required information (e.g., date of birth, race, gender, card preparation date, arrest/conviction date) or the "Offenses on Back of Card" box is "no," attempt to obtain the information from any additional documentation received with the sample. Additionally, an attempt may be made to obtain the information from DPS/Division of Adult Correction or another law enforcement database. Enter the information from the law enforcement database into the notes of the specimen record and update the collection card. If the information is not found select "Received – Pending Request for Missing Information" as the specimen status and save the record, but do not close it.

NOTE: Do not obtain arrest/conviction date solely using the DPS/Division of Adult Correction website or another law enforcement database (see **5.5.8**). If the card prepared date is missing from the card, the sample collection date located on the white transport pouch may be used. A note shall be made in the specimen record if the sample collection date is used in lieu of the card prepared date.

5.5.8   If the card is missing required information that cannot be obtained from a law enforcement database or no offense(s) is listed on the card, select "Received-Pending Request for Missing Information" as the specimen status and save the record but do not close.

5.5.9   Attach the saved card as a note in the specimen record. When uploading the scanned collection card, do not enter a date and initials to the note. If a note is needed regarding the condition of the sample, add a note to the specimen record and initial and date.

5.5.10   For rejected samples, set aside buccal samples for rejection processing (see **5.7**) and set aside blood samples for staining (see **5.6**). After staining, all rejected blood samples shall be set aside for rejection processing.

5.5.11   For arrestee samples that are missing required information, proceed to **5.7.2**.

5.5.12   For acceptable convicted offender samples, proceed to the "Viewing the Person-Donor Duplicate Report" section of this procedure.

5.5.13   Set aside blood samples for staining. Set aside buccal samples for eligibility verification or duplicate verification.

5.6 **Blood Sample Staining**

5.6.1 All liquid blood samples shall be stained under a biosafety hood. Turn on both the light and the blower in the biosafety hood before staining.

5.6.2 Verify that the donor's name and other identifiers match on both the card and the blood tube. Initial and date the top portion of the S&S paper (or equivalent).

5.6.3 When staining, place the S&S (or equivalent) paper into a new weigh boat.

5.6.4 Gently invert the blood tube multiple times in order to mix the components that may have settled at the bottom of the tube. Using a fresh tissue wiper, carefully remove the rubber stopper from the blood tube by easing the grooved side of the stopper to the rim of the test tube.

NOTE: Tube tops are sealed with negative pressure and may spatter if not opened carefully. While pointing the tube away from you, open all tubes under the hood and behind the safety glass.

5.6.5 Stain approximately three-fourths of the S&S paper (or equivalent) with a clean, disposable pipette. When staining is complete, place the pipette inside the blood tube and carefully place both into the biohazard waste container. If it is determined that there is insufficient blood to stain three-fourths of the S&S paper (or equivalent), concentrate the blood at the bottom portion of the card.

5.6.6 Place the weigh boats (each containing a bloodstain) onto the shelves of the biosafety drying hood unit overnight.

5.6.7 Place the coin envelope containing the dried bloodstain into the labeled multi-barrier pouch.

5.7 **Rejection Processing**

5.7.1 Review the status and rejection reasons for the sample.

5.7.2 If the sample is in a status of "Received – Pending Request for Missing Information," contact the submitting agency by using the Fax Requesting Missing Information report or a telephone call. If a fax is sent, attach the scanned fax as a note in the specimen record. If a telephone call is made, record the conversation as a note in the specimen record. In lieu of contacting the agency, employees designated to perform Secondary Verification (see **5.9**) may access a law enforcement database to obtain certain information (e.g., DOB, sex, and race), update the record and proceed with verifying the eligibility.

5.7.2.1 Change the specimen status to "Received – Awaiting Missing Information Response." Once the missing information has been received and documented in SpecMan, change the specimen status to "Received." If the sample is being rejected, continue with Rejection Processing.

5.7.3 For any other sample status, follow procedures outlined in the "Viewing Person Donor Duplicate Report" portion of this document.

5.7.4   If the sample does not need to be resubmitted because there is an acceptable sample on file, verify the duplicate as outlined in **5.12.** The status of the sample shall be changed to "Rejected-Pending Return." Generate a rejection letter as outlined in **5.7.6.2.3**. Proceed to **5.14**, "Returning Rejected Samples to Agency."

5.7.5   If the sample was rejected because no complete profile was obtained or a mixed profile was obtained and another potential duplicate sample has been located and may be analyzed in its place using the Person-Donor Duplicate Report, assign the potential duplicate sample to a regular batch for analysis using the "Analysis Batch Assignment" section.

5.7.6   If the sample needs to be resubmitted and does not have an acceptable sample on file, verify eligibility following procedures outlined in **5.8**, "Eligibility Verification."

  5.7.6.1   If the sample is ineligible due to no qualifying event, ensure rejection reasons are correct for the sample. Verify that the status is "Rejected – Pending Return." Proceed to **5.14**, "Returning Rejected Samples to Agency."

  5.7.6.2   If the sample is being rejected but the qualifying event is eligible, a resubmission request is required.

    5.7.6.2.1   If a resubmission is being requested from another agency, enter additional resubmission contact information.

    5.7.6.2.2   Change the resubmission option to "yes." Save specimen record, but do not close it. SpecMan automatically creates a new specimen record for the resubmission in a status of "Resubmit–Pending Receipt." If the sample has a red dot (rejection reason indicating that the sample cannot be accepted (e.g., no qualifying event, broken blood tube, improper identifiers, damaged) or no dot, ensure the sample status is "Rejected-Pending Return."

    5.7.6.2.3   Generate the rejection/resubmission letter for the sample from the Reports menu on the sample form. Save and print the letter(s). If a separate resubmission agency, as opposed to the original submitting agency, was selected for the sample, a rejection letter prints for the original submission agency, while a resubmission request letter prints for the specified resubmission agency. Attach the saved letter as a note in the specimen record. NOTE: If a rejection/resubmission letter(s) for the sample is/are generated offline using MS Word, ensure that the letter(s) is/are addressed to the correct agency/agencies and is/are formatted correctly. Print the letter(s) on letterhead. Attach a .pdf copy of the letter(s) as a note in the specimen record.

      5.7.6.2.3.1   If the sample has a red dot or no dot, proceed to **5.14**, "Returning Rejected Samples to Agency."

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5.7.6.2.3.2 If the sample has a blue dot (rejection reason indicating that the sample has only a fingerprint issue), assign the sample to a regular batch as outlined in "Analysis Batch Assignment."

5.8 **Eligibility Verification**

5.8.1 All qualifying events shall be verified by Database employees to determine if they are acceptable according to Article 13 of Chapter 15A of the North Carolina General Statutes.

5.8.2 The conviction/arrestee information for the sample/person as well as the identifying information may be verified, obtained and/or updated using the following sites:

5.8.2.1 North Carolina Department of Public Safety's website (DPS) http://www.doc.state.nc.us/offenders/

NOTE: Eligibility shall not be determined based only on information from DPS/Division of Adult Correction.

5.8.2.2 Administrative Office of the Courts (AOC)

5.8.2.3 Computerized Criminal History Records (CCH)

5.8.2.4 North Carolina General Assembly Website (NCGA) http://www.ncga.state.nc.us/gascripts/Statutes/Statutes.asp

5.8.2.5 Any law enforcement database resource containing criminal record information approved by the Forensic Scientist Manager

5.8.3 In SpecMan, ensure that the date of qualifying event (date of arrest or conviction date) provided on the collection card is entered into the specimen record. The date of qualifying event, if not indicated on a convicted offender collection card, may be located using the resources listed above. If a qualifying event date is not found, add a note to the specimen record and change the specimen status to "Secondary Verification."

5.8.4 Change the specimen status to "Pending CCH Search" and save the record, but do not close it.

5.8.5 SpecMan queries CCH and changes the specimen status to "CCH Results Pending Eval." The Database employee shall use the information from the CCH Results and the information provided on the collection card to determine whether a sample is eligible for processing under the law. If the DNA Database employee is trained to process samples in "Secondary Verification," the employee may proceed to **5.9.3** without changing the status to "Secondary Verification."

5.8.6 SpecMan queries CCH using the data entered into the specimen record in the following order, with "Date" defined as date of qualifying event:

5.8.6.1 CCH searches for convicted samples using the following hierarchy:

      (a)   If SID plus Date is provided, search by SID + Date.

      (b)   If no results are generated from (a) above and FBI Number plus Date is provided, search by FBI number + Date.

      (c)   If no results from (a) or (b) and Offender Number (DPS) is provided, search by Offender Number + Date.

      (d)   If no results from (a), (b) or (c) and Name, Race, Sex and DOB are provided, search by Name, Race, Sex and DOB.

5.8.6.2 CCH searches for arrest samples using the following hierarchy:

      (a)   If EFN is provided, search by EFN.

      (b)   If no results are generated from (a) above, and Check Digit plus Date is provided, search by Check Digit + Date.

      (c)   If no results from (a) or (b) above, and SID plus Date is provided, search by SID + Date.

      (d)   If no results from (a), (b) or (c) above, and FBI Number plus Date is provided, search by FBI number + Date.

      (e)   If no results from (a), (b), (c) or (d), and Name, Race, Sex and DOB are provided, search by Name, Race, Sex and DOB.

5.8.7 View the CCH Results record(s) for the sample by clicking the CCH Results tab on the left side of the specimen screen.

5.8.7.1 If a CCH record is not found in SpecMan, add a note to the specimen record and change the specimen status to "Secondary Verification" Save and close the record.

5.8.7.2 If there are CCH records returned, open the CCH result corresponding to the qualifying event for the conviction or arrest and review the information in the general tab to ensure the information returned is for the same person. If the information in the CCH Result is not for the same person or there are significant discrepancies, add a note to the specimen record and change the specimen status to "Secondary Verification."

NOTE: SpecMan CCH results are records that result from CCH information stored in a database operated by the Criminal Information and Identification Section (CIIS) and appear as entries in the CCH Results tab on the specimen screen.

5.8.8 Verify that the offense(s) found in the SpecMan CCH query matches the offense information provided by the submitting agency.

NOTE: CCH offenses are part of each CCH result and appear as entries in the CCH Offenses tab on the CCH results screen.

5.8.8.1 If no matching CCH results are found, non-matching offenses that are

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consecutive, consolidated, or concurrent with the offense provided on the card shall be verified.

5.8.8.2 If the offenses do not match and cannot be verified, add a note to the specimen record and change the specimen status to "Secondary Verification."

5.8.8.3 If the offenses do match, qualifying event eligibility is verified using several steps that take into account the following factors: date of qualifying event, the G.S. number, the offense description, and the specimen reason (arrestee or convicted offender). All of these steps must be taken to ensure that each sample is accepted pursuant to Article 13 of Chapter 15A of the NC General Statutes.

5.8.8.3.1 If there is not a date in the Begin DNA field for the type of sample being processed (convicted or arrested), SpecMan considers that G.S. number ineligible for convicted offender or arrestee collection, respectively. In some cases, the G.S. is eligible for collection, but the Begin DNA date is not populated. This is due to variation in how records are entered by different agencies. In these cases, the Database employee shall consult a law enforcement database to ensure that the conviction or arrest event occurred. If the event occurred, add the appropriate Begin DNA date utilizing the NCGA website and add a note to the Specimen record.

5.8.8.3.2 If there is a date in the Begin DNA field for the type of sample being processed (convicted or arrested), then ensure that the date of qualifying event is on or between the respective dates in the Begin DNA and the End DNA fields. If there is no end date indicated, then SpecMan considers that collection for that G.S. has not ended.

5.8.8.3.3 The Database employee may need to consult the NCGA website when the Begin DNA date is any date other than the known collection Begin date for the G.S. associated with the offense(s) and Article 13 of Chapter 15A of the NC General Statutes.

5.8.9 If the Database employee determines that the CCH Result records indicate that the sample is not eligible, add a note in the specimen record and change the specimen status to "Secondary Verification," save and close the record.

5.8.10 If the Database employee determines that the CCH Result records indicate that the sample is eligible, change the specimen status to "Eligibility Verified" and save the record. Only one CCH result returned by SpecMan may be captured and saved permanently in the specimen record. If more than one CCH result is returned, select the record that matches the information provided by the agency and was used to determine that the sample is eligible for collection. Setting the specimen status to "Eligibility Verified" results in the numerical identifiers for the sample and its donor being updated to be consistent with the CCH values. This does not cause name, SSN, date of birth, or any other descriptive information fields to be overwritten.

NOTE: The correct CCH result is selected by removing the additional CCH results from the specimen record. CCH offenses are not to be removed.

5.8.10.1 Upon changing the specimen status to "Eligibility Verified," the system does not allow the record to be saved if the card prep date is before the date of qualifying event. If this occurs, add a note to the specimen record and set the specimen status to "Secondary Verification" and save and close the record.

NOTE: When processing a blood sample, both the card prepared date and sample collected/received date shall be evaluated. When processing buccal samples, the card preparation date and sample collection date on the white transport pouch shall be evaluated. If the card prepared date is prior to the qualifying event date, the sample collected/received date shall be entered into the system (instead of the card prepared date) as long as it is after the qualifying event date. A note shall be added to the specimen record in SpecMan.

5.8.10.2 Upon changing the specimen status to "Eligibility Verified," SpecMan determines if the selected CCH Results meet statutory requirements for the sample to be processed. If not, the system automatically changes the specimen status to "Secondary Verification." If so, the sample remains in "Eligibility Verified" status.

5.8.11 If the sample remains in "Eligibility Verified" status, indicate the correct qualifying event G.S. (i.e., 14-54(a), 14-87.1, "common law") on the collection card, the source of the information, initial and date.

5.9   Secondary Verification

5.9.1 All samples in "Secondary Verification" status shall be processed by designated Database employees.

NOTE: SpecMan requires that the user changing the status from "Secondary Verification" to "Eligibility Verified" or "Rejected – Pending Return" be different from the user that originally placed the sample in "Secondary Verification" or "Rejected-Pending Return" status.

5.9.2 Open each specimen record and review the notes and the SpecMan CCH results, if any, to determine the reason for the secondary verification.

5.9.3 Search AOC, CCH, or another law enforcement database in order to determine if a qualifying event (arrest or conviction) exists for the sample. This process uses the same decision-making process as the "Eligibility Verification" section of this procedure; however, it is performed without the assistance of SpecMan. The following factors shall be considered to ensure that all samples are accepted pursuant to Article 13 of Chapter 15A of the NC General Statutes.

5.9.3.1 Identifying information associated with the specimen (e.g., name, DOB, race, gender)

5.9.3.2 Numerical identifiers associated with the specimen (e.g., Offender Number (DPS), SID, FBI, check digit number)

5.9.3.3 Specimen reason (arrested or convicted)

5.9.3.4 Date of qualifying event (date of arrest or date of conviction)

5.9.3.5 Offense information documented on the card

5.9.3.6 Offense description and G.S. found in the query(s)

5.9.3.7 Collection Begin date for the G.S. associated with the offense(s) and Article 13 of Chapter 15A of the NC General Statutes.

5.9.3.8 Court records or documentation received with the sample and attached to the specimen record

5.9.3.9 Additional notes provided by the agency on the collection card

5.9.4 If the sample is determined to be eligible, the following steps shall be taken.

5.9.4.1 Print to .pdf and attach the documentation from query(s) to the specimen record.

5.9.4.2 Add numerical identifiers obtained from the query as relevant to the event on the card to the specimen record.

5.9.4.2.1 For arrestees, this shall include, check digit number SID, and FBI numbers, if available.

5.9.4.2.2 For convicted offenders, this shall include SID, and FBI numbers, if available.

5.9.4.3 Add a note to the specimen record indicating the correct qualifying event G.S. (i.e., 14-54(a), 14-87.1, "common law"), which numerical identifiers were added to the specimen record, the source of the information, initial and date.

5.9.4.4 Ensure that the correct CCH results/offenses at eligibility are entered into the specimen record.

5.9.4.5 Remove any relevant rejection reasons.

5.9.4.6 Change the specimen status to "Eligibility Verified."

5.9.4.7 Indicate the correct qualifying event G.S. (i.e., 14-54(a), 14-87.1, "common law") on the collection card, the source of the information, initial and date.

5.9.5 If the sample is determined to be ineligible, the following steps shall be taken.

5.9.5.1 Print to .pdf and attach to the specimen record the documentation from at least two queries. Alternatively, the documentation may be printed as a hardcopy and retained within the DNA Database Section.

5.9.5.2   Add numerical identifiers obtained from the query as relevant to the event on the card to the specimen record.

> **5.9.5.2.1** For arrestees, this shall include check digit number SID, and FBI numbers, if available.

> **5.9.5.2.2** For convicted offenders, this shall include SID, and FBI numbers, if available.

5.9.5.3   Add a note to the specimen record indicating the reason for rejection, which numerical identifiers were added to the specimen record, the source of the information, initial and date.

5.9.5.4   Remove any existing CCH results. This ensures that the ineligible offense is documented in the note section for secondary verifications.

5.9.5.5   Edit rejection reason(s) to ensure all relevant reasons are present.

5.9.5.6   Change the specimen status to "Rejected – Pending Return."

> **5.9.5.6.1** For samples rejected because the card was prepared before the date of qualifying event, proceed to the "Rejection Processing" section to determine if a resubmission is required.

> **5.9.5.6.2** For all other samples, proceed to the "Returning Rejected Samples to Agency" section.

5.9.6   If there are no qualifying events found, or if there is insufficient information provided by the submitting agency to process the sample, an attempt to contact the appropriate law enforcement agencies may be made by a Database employee in an attempt to determine if the person has a qualifying event. If insufficient information is obtained from contacting the appropriate agency regarding the reason for collecting a sample, or if the Database employee cannot determine if the sample has a qualifying event, laboratory legal counsel provides a legal recommendation which shall be followed by the Database employee.

5.10   **Viewing the Person-Donor Duplicate Report**

5.10.1   At various statuses, the samples associated with the same person or donor shall be reviewed to determine how the sample will be processed.

5.10.2   Run the Person-Donor Duplicate Report for the sample, and view the samples associated with that person or donor. The report broadly searches for samples that may be from the same person or donor based on shared identifiers or based on a similar name and proximal date of birth pattern. The report also searches for existing potential matching expunction requests based on the same criteria.

5.10.2.1   When accessioning, the Person Donor Duplicate Report is added to the specimen notes section in SpecMan as a .pdf when the status is changed to "received." See **5.5.12** to continue sample processing.

NOTE: The Forensic Scientist Manager shall be notified of any potential matching

expunction requests for arrestee samples. The Forensic Scientist Manager shall determine whether this sample shall be expunged or processed.

5.10.2.2 If no potential duplicate samples are listed for the current sample complete the accessioning process and determine offense eligibility. If the current sample is acceptable and is in "Eligibility Verified" status, assign the current sample to a regular batch as outlined in "Analysis Batch Assignment."

5.10.2.3 If potential duplicates are listed for the current sample, follow the procedures outline in the "Duplicate Processing" section.

5.10.2.4 For any acceptable in-process samples or convicted offender samples that are missing required information, if a listed potential duplicate sample is past the point of analysis batch assignment or is in the status of "Stored-Entered in CODIS," write the sample number and storage envelope number (if populated) of the potential duplicate sample on the card of the current sample and change the status of the current sample to "Duplicate-Pending Verification" and set aside for duplicate processing.

5.10.2.5 If the current sample is undergoing rejection processing, set the sample aside for eligibility verification and proceed to **5.7.6** if one of the following is correct:

    5.10.2.5.1 No potential duplicate samples are listed for the current sample.

    5.10.2.5.2 None of the potential duplicate samples have reached the point of analysis batch assignment or are in a status of "Stored-Entered in CODIS."

5.10.2.6 If the current sample is undergoing rejection processing and a listed potential duplicate sample is currently assigned to an analysis batch or is in the status of "Stored-Entered in CODIS", write the sample number and storage envelope number (if populated) of the potential duplicate sample on the card of the current sample and change the status of the current sample to "Duplicate-Pending Verification." Continue with **5.7.4**.

5.10.3 If the current sample is in "Eligibility Verified" status, from the Person-Donor Duplicate Report screen, identify any potential duplicate samples that are in the status of "New-Pending Receipt," or samples in any status with the resubmit option marked as "yes." If there are none, no action is required. For any resubmit "yes" status found, process according to the steps cited below.

5.10.3.1 For samples identified above that are in the status of "New-Pending Receipt," the following shall be completed:

    5.10.3.1.1 Open each "New-Pending Receipt" record.

    5.10.3.1.2 Compare the "New-Pending Receipt" record to the current sample's record and determine if they are for the same qualifying event by comparing date of qualifying event, EFN/check digit

numbers (for arrestees).

5.10.3.1.2.1 If they are from the same event, change the status of the "New-Pending Receipt" record to "Closed-Submission Received Separately."

5.10.3.1.2.2 If they are not from the same event, and the "New-Pending Receipt" record is more than 60 days old, change the status of the "New-Pending Receipt" record to "Closed-Submission Not Received in Expected Timeframe." Records less than 60 days old require no action.

5.10.3.2 For samples identified above that require a resubmission, the following shall be completed:

5.10.3.2.1 For all potential duplicates with resubmit "yes" option, change the Resubmissions option under the Processing tab to "No" and save. Click on the Pending Resubmission menu tab of this specimen record. If there is a sample in this field in a "Resubmit-Pending Receipt" status, change the sample to "Closed-Resubmission Received Separately". If not, no action is required.

5.11 Analysis Batch Assignment

5.11.1 Regular Batches

5.11.1.1 Samples that reach this step shall be in a status of "Eligibility Verified."

5.11.1.2 Each sample to be assigned to a regular batch shall be added to a batch with the appropriate batch type (blood or buccal) and batch reason (convicted or arrested). If an open batch of the appropriate type is not available, create a new one.

5.11.1.3 To create a batch utilizing the SpecMan Import process, open the Batch Assignment Template Excel file and enter or scan the specimen numbers in the appropriate cells. For batches with less than 80 specimens, delete the entire row not containing a specimen number.

5.11.1.4 Save the Excel file as a ".csv" file.

5.11.1.5 Import the file into SpecMan. The Record Type should be set to "Batch Assignment Import."

5.11.1.6 After the specimens have been assigned a batch, run the "Batch Duplicates Report."

5.11.1.7 To remove any duplicate specimens and replace with a new specimen, go to the specimen record for the specimen to be deleted from the batch.

5.11.1.8 In the Processing tab remove the information in the "Batch", "Plate Position", and "Sequence Number" fields.

5.11.1.9 In the Admin tab delete the "Storage Envelope" number.

5.11.1.10 Save the record, but do not close.

5.11.1.11 Add the replacement specimen using the same batch number currently in process and change the specimen status to "Stored-Pending Analysis."

5.11.1.12 Save and close the record.

5.11.1.13 When the batch has the correct amount of specimens assigned to it, change batch status to "Stored – Pending Analysis." At this point, the sequence numbers will be assigned to each specimen.

5.11.1.14 A regular batch is defined as a COB, COS, ARB, ARS batch prefix (convicted blood, convicted buccal swab, arrested blood, arrested buccal swab, respectively). Samples in regular batches are not QC samples, rejected or duplicate samples, or confirmation samples.

5.11.1.15 Add the batch number to the Batch field under the Processing tab and save to generate the sequence number.

5.11.1.16 For buccal samples, run the Storage Envelope Label report (or use the "Batch Storage Envelope Labels" report) and print the storage labels. Place one underneath the specimen number barcode on the envelope and one in the upper left hand corner of the collection card. Verify that the specimen numbers located on the buccal collector, envelope, and collection card match. Never cover up any information on a card. If there is writing or information where the normal placement location is, place the barcode in another appropriate location.

5.11.1.17 For blood samples, run the Storage Envelope Label report (or use the "Batch Storage Envelope Labels" report) and print the storage labels. Place one label underneath the specimen number barcode on the multi-barrier pouch and one in the upper left hand corner of the collection card. Verify that the specimen numbers on the filter paper, collection card, and multi-barrier pouch match. Never cover up any information on a card. If there is writing or information where the normal placement location is, place the barcode in another appropriate location.

5.11.1.18 After batching is complete, the DNA collection card associated with each buccal sample shall be scanned as a .pdf and the image saved in SpecMan.

5.11.1.19 The DNA collection card associated with each blood sample shall be scanned and image saved.

5.11.1.20 Place the batch in a storage location within the DNA Database Section. Regular batches shall be processed as outlined in "Analysis of Database

Samples to Develop DNA Profiles" in the DNA Database Section Procedure for DNA Database Operations.

5.11.2 Confirmation Batches

5.11.2.1 Each sample to be assigned to a confirmation batch shall be added to a batch with batch reason "Held Duplicate," the appropriate batch type (blood or buccal), and the appropriate rerun method (robotic or manual). A confirmation batch is defined as a HDB or HDS batch prefix (held duplicate blood and held duplicate swab, respectively) with the confirmation option marked as "yes." If an open batch of the appropriate type is not available, create a new one and print the batch label before beginning.

5.11.2.2 Add the batch number to the Batch field under the Processing tab and save to generate the sequence number.

5.11.2.3 Print and label the sample as described in **5.11.1.5** (buccal) or **5.11.1.6** (blood).

5.11.2.4 Change the specimen status to "Stored – Pending Confirmation."

5.11.2.5 Once the batch is full, change the batch status to "Stored – Pending Confirmation."

5.11.2.6 Place the batch in a storage location within the DNA Database Section. Confirmation batches shall be processed as outlined in "Confirmation Testing" in the DNA Database Section Procedure for DNA Database Operations.

5.11.3 Other Batch Types

5.11.3.1 Rerun batches (with prefixes RBR, RSR, RBM, RSM) and QC batches (with prefixes QCB and QCS) are explained in detail in the DNA Database Section Procedure for DNA Database Operations. Samples are not assigned to these batch types during the accessioning process.

5.12 Duplicate Processing

5.12.1 Each sample in "Duplicate – Pending Verification" Status shall be verified before it is stored by visually comparing the information in the potential duplicate sample's specimen record (the original sample) or card with the information on the current sample's collection card or record to determine if they are from the same donor. NOTE: For rejection processing, ensure that the original sample is acceptable and is available in the proper storage location.If the information contained within the records of the current sample and the potential duplicate sample (the original sample) is consistent, proceed to the "Storing Duplicate Samples" section.

5.12.2 If the samples are from different donors, use the Person/Donor report to determine if the sample requires analysis. If so, assign the sample to the proper analysis batch type using instructions in the "Analysis Batch Assignment" section.

5.12.3 If it cannot be determined that the samples are from the same donor, the current sample shall be batched as described in **5.11.2**.

5.13   Storing Duplicate Samples

5.13.1 Each sample awaiting "Duplicate –Pending Verification" status shall be assigned to a duplicate storage batch of the appropriate batch type (blood or buccal). A duplicate storage batch is defined as a HDB or HDS batch prefix (held duplicate blood and held duplicate swab, respectively). If an open batch of this type is not available, create a new one and print the batch label before beginning.

NOTE: If the duplicate sample's offense has not been verified for its eligibility assign the sample to a storage batch with the "Non-Eligibility Verified" option marked as "Yes." Add the batch number to the Batch field under the Processing tab and save to generate the sequence number.

5.13.2 Print labels and label the sample as described in **5.11.1.5** (buccal) or **5.11.1.6** (blood).

5.13.3 Change the specimen status to "Stored – Duplicate."

5.13.4 Once the batch is full, change the batch status to "Stored – Duplicate."

5.13.5 Place the batch in a storage location within the DNA Database Section.

5.14   Returning Rejected Samples to Agency

5.14.1 Each sample in "Rejected – Pending Return" status shall be returned to the submitting agency by completing the following:

5.14.1.1 Generate a rejection letter as described in **5.7.6.2.3** (if not already completed).

5.14.1.2 For buccal samples, stamp/mark the bar-coded region of the collector with the word "Rejected" in red and place the collector inside its white transport pouch. Seal the pouch with tape and initial the tape seal. Stamp/mark the bar-coded region of the white pouch with the word "Rejected" in red as well. Place the sealed transport pouch and the card (also with the bar-coded region marked with the word "Rejected" in red) into a white business letter size envelope.

5.14.1.3 For blood samples, stamp/mark the bar-coded regions bloodstain with the word "Rejected" in red and place the bloodstain into a multi-barrier pouch. Seal the multi-barrier pouch and initial the seal. Stamp/mark the bar-coded region of the multi-barrier pouch with the word "Rejected" in red as well. Place the sealed multi-barrier pouch and the card (also with the bar-coded region marked with the word "Rejected" in red) into a white business letter size envelope.

NOTE: (**5.14.1.2** and **5.14.1.3**) For samples being rejected, components referenced in this section may not be present. In these cases, prepare the other components as described.

5.14.2 Place a biohazard sticker on both the exterior manila envelope and the interior envelope containing the sample and card. In addition, place a sticker stating "Contains a bloodstain and/or a cheek cell sample. Use gloves when opening." on the inner envelope. For buccal and blood samples, place the white envelope containing the rejected sample into a manila envelope with the rejection letter.

5.14.3 Mail the manila envelope to the submitting agency. Change the specimen status to "Rejected – Returned to Agency."

5.14.4 If the Forensic Scientist Manager or designee determines that the sample shall be retained and not returned to the agency (e.g., sample without submitting agency information), change the specimen status to "Rejected – Pending Storage" before generation of the rejection letter (if applicable) and store the sample in the following manner:

5.14.4.1 Each sample in "Rejected – Pending Storage" status shall be assigned to a rejection storage batch of the appropriate batch type (blood or buccal). A rejection storage batch is defined as a HRB or HRS batch prefix (held rejected blood and held rejected swab, respectively). If an open batch of this type is not available, create a new one and print the batch label before beginning.

5.14.4.2 Print labels and label the sample as described in **5.11.1.5** (buccal) or **5.11.1.6** (blood).

5.14.4.3 Change the specimen status to "Stored – Rejected."

5.14.4.4 Once the batch is full, change the batch status to "Stored – Rejected."

5.14.4.5 Place the batch in a storage location within the DNA Database Section.

5.15 **Sealing**

5.15.1 All samples shall be sealed prior to permanent storage.

5.15.2 **Blood Sample Heat Sealing**

5.15.2.1 Prior to sealing, each multi-barrier pouch shall receive a desiccant. Do not place the desiccant inside the coin envelope. The desiccant shall not be in contact with the blood stained S&S paper (or equivalent). Desiccants shall be alternated from the bottom portion of one pouch to the top half of the next pouch for ease in storing.

5.15.2.2 Push the coin envelope containing the bloodstain as far down in the pouch as possible. Press the power (on/off) button on the heat sealing machine. The controls shall be set to the following:

V (vacuum):   14

G (gas):   00

S (sealing):   2.0

5.15.2.3 Place multi-barrier pouches on the left and right side bar of the machine with the open ends of the pouches lying on the heat sealing bars. Pull the top down using the metal handle in the front of the machine. Hold the handle down firmly until the pressure begins building within the machine. After a few moments, the pressure is released and the lid rises automatically. Remove the multi-barrier pouches and place them in sequential order for storage.

5.15.3 Buccal Sample Sealing

5.15.3.1 Seal the white transport pouch with a piece of transparent, adhesive tape.

5.16 Sample and Document Retention

5.16.1 Database samples shall be retained for a minimum of fifty years.

5.16.2 To preserve the integrity of the samples, Database samples which have been tested for their DNA profile shall be retained in a designated storage area within the State Crime Laboratory. All other samples being processed may be located in temporary storage areas within the State Crime Laboratory.

5.16.3 The DNA Database chain-of-custody sample inventory form received with samples from the North Carolina Department of Public Safety/Division of Adult Corrections shall be retained according to the record retention schedule as set forth by the North Carolina Department of Cultural Resources.

6.0 Limitations – N/A

7.0 Safety – Exposure to blood borne pathogens may occur in performing of the procedures in this document. Therefore, use personal protective equipment (e.g., gloves, lab coats).

8.0 References

DNA Database Section Administrative Policy and Procedure

DNA Database Section Administrative Procedure for Safety and Hazardous Waste Disposal

DNA Database Section Procedure for DNA Database Operations

DNA Database Section Procedure for DNA Reagent Quality Control

DNA Database Section Procedure for Instrument and Equipment Quality Control

DNA Database Section Procedure for Sample Accessioning and Processing Training

DNA Database Section Procedure for Sample Processing Quality Control

North Carolina Department of Cultural Resources Record Retention Schedule

State Crime Laboratory Safety Manual

9.0 Records

- Correctional Inventory Sheets Notebooks/Files
- DNA Database Sample Inventory Form
- Sample Processing Disinfection Log

10.0   Attachments – N/A

Revision History		
Effective Date	Version Number	Reason
12/18/2013	1	Original Document
04/18/2014	2	5.5.3.2.1.2 changed to 5.5.3.2.2 ; 5.5.3.2.1.3 changed to 5.5.3.2.2.1; 5.5.3.2.1.4 changed to 5.3.2.2.2; 5.5.3.2.2 changed to 5.5.3.2.3; 5.5.11 - added arrestee samples missing information; 5.5.12 - added convicted offender; 5.5.13 - added duplicate verification; 5.8.5 - added note that trained employees may proceed to 5.9.3; 5.10.2.3 - added CO samples missing information that are duplicates can be changed to status "Duplicate-Pending verification"
08/29/2014	3	5.5.2 - removed buccal samples; 5.5.3.1 - added envelope integrity statement; 5.5.3.1.5 - removed (reference trifold cards), clarified location to place barcode; 5.5.3.1.6 - clarified location on card to initial; 5.5.3.1.7 - clarified location to place barcode; 5.6.3, 5.6.6, 5.6.7 - updated blood staining procedure; 5.8.3 - removed "blood" to include both sample types; 5.11.1.6 - updated blood sample storage; 5.14.1.3 and 5.14.2 - updated sample rejection; 5.14.2.1 and 5.14.2.2 - removed (consolidated); 5.15.1.6 and 5.16.2 - updated blood sample storage and heat sealing; 5.4.2 - Inventory Forms for blood samples optional
08/12/2015	4	5.1 - removed responsibilities for FSM, FSS, and Legal; 5.3 - added reference to DNA Database Operations and deleted aseptic; 5.5.1.1 - clarified rejected samples not to be resubmitted; 5.5.5 - removed sufficient quality for Latent prints; 5.11 - changed storage labeling; 5.14 - removed (cutting); updated References
10/09/2015	5	Changed Information Processing Technician (IPT) to Criminal Justice Specialist (CJS) throughout; 5.8.8.3.1 - add Begin DNA date utilizing NCGA website
12/21/2015	6	5.10.2.1 PDDR added automatically; 5.11 updated to incorporate IT changes to batching
4/18/2016	7	5.10 and 5.13-update PDDR and Duplicate Processing

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