# **FIREARM and Toolmark Section**

# **FIREARMS**

#### • POSSIBLE EXAMINATIONS

- o Function test and test fire
  - NIBIN entry
- Microscopic comparison with bullet(s) or cartridge case(s)
- o Serial Number Restoration
- o Distance Determination

#### FIREARM COLLECTION

- o Photograph the firearm in place prior to handling. Note:
  - Location found
  - Safety position
  - Loaded / Unloaded, Cocked
- o If possible, render the firearm safe
  - Remove any magazines
  - Remove cartridges from the chamber
  - Revolvers: Open or remove the revolver cylinder, or unload each chamber
- If the firearm cannot be made safe (e.g., firearm is jammed, too corroded, or too rusted)
  - Put the safety on if possible
  - Secure only the firearm in a box
  - Indicate on the outside of the box:
    - Muzzle direction
    - That the firearm is UNSAFE
  - Notify the Crime Laboratory that the firearm is LOADED before or immediately upon arrival
  - During firearm submission, request a consultation with a firearms examiner

 Document <u>all</u> changes made to the firearm once it is collected and notify the lab via photos and/or notations

# • LABELING AND PACKAGING

- o Firearm(s)
  - Place the unloaded\* firearm in a handgun or long gun box, with the slide locked back, if possible
    - Note: See above regarding loaded firearms.
  - Use cable ties to secure the grip and barrel of the firearm to the box
    - Keep cable tie knot inside of the box. Do not cut cable tie
  - DO NOT place a cable tie through the trigger guard, or through the barrel
  - If a magazine was recovered with the firearm:
    - Secure the magazine inside the same box with a cable tie
    - Magazines do not have to be unloaded
  - If cartridges were recovered with the firearm:
    - Unfired cartridges can be retained in the magazine, or packaged in a separate envelope inside the same box
    - Tape Seal the envelope, Initial and Date the tape seal, and Label the envelope with contents
      - o Ex) Three (3) unfired 40 S&W cartridges from magazine
      - o Ex) One (1) unfired 40 S&W cartridge from chamber
  - On the outer packaging, indicate clearly, with an arrow, which direction the muzzle is pointing inside the box
  - Tape Seal the box, covering any holes created from the cable ties, Initial and Date the tape seal, and Label the box with contents
    - Ex) One (1) 9mm Luger Glock model 19Gen5 semi-automatic pistol with serial number: 12345, one (1) magazine, three (3) 9mm Luger cartridges, recovered from backseat of vehicle driven by John Doe, Placard A
    - If serial number is scratched, obliterated, rusted, or missing, note "Serial Number: Unknown" on packaging. A serial number restoration can be requested. See serial number restoration section.

#### ENVIRONMENTAL CONDITIONS

- o If the firearm is found submerged in water:
  - Place the firearm in a leak proof container
  - Cover with water from the location the firearm was found
  - Keep it in that water and package in a leak proof container with water from where it was found
- o If the firearm is found in rain or snow:
  - Air dry before packaging
- o If the firearm is at potential risk for severe rust or has tissue putrefaction on it:
  - Package in a box and place in a freezer as soon as possible
- Contact the Crime Laboratory as soon as possible

# UNFIRED CARTRIDGE(S) AND / OR FIRED CARTRIDGE CASE(S)

#### • POSSIBLE EXAMINATIONS

- o NIBIN Entry
- Microscopic comparisons

# • CARTRIDGE(S) AND / OR CARTRIDGE CASE(S) COLLECTION

- o Photograph items in place prior to handling: Note:
  - Location found
  - Ouantity
  - Fired or unfired

# • LABELING AND PACKAGING

- o Unfired (live) cartridges:
  - If unfired cartridges are located in the same area or grouping at the scene,
    package together in paper bag, envelope, or small box
  - Tape Seal, Initial and Date the tape seal, and Label the packaging with contents
    - Ex) Four (4) unfired 9mm Luger cartridges from Placard C
- o Fired cartridge cases:

- If fired cartridge cases are located in the same area or grouping at the scene, package together in paper bag, envelope, or small box
  - If separated at the scene, package separately
- Tape Seal, Initial and Date the tape seal, and Label the packaging with contents
  - Ex) Six (6) fired 223 Rem cartridge cases from bedroom

# **FIRED BULLETS**

#### POSSIBLE EXAMINATIONS

- o General Rifling Characteristics (GRC)
- Microscopic comparisons

# • BULLET(S) COLLECTION

- o Photograph items in place prior to handling: Note:
  - Location found
  - Quantity

#### LABELING AND PACKAGING

- o Package individually in paper bag, envelope, or small box
- o Tape Seal, Initial and Date the tape seal, and Label the packaging with contents
  - Ex) One (1) bullet from front door
- o If the bullet is removed from a HUMAN BODY or ANIMAL CARCASS, rinse and dry the bullet. Remove as much tissue as possible.
  - If the bullet cannot be cleaned and dried, it must be placed in a freezer and evidence receiving must be notified of its condition upon evidence submission

#### EXAMINATIONS AT THE CRIME LABORATORY

- Firearm function and test fire
  - Determine if the firearm is operable. Collect test fired cartridge cases and bullets for microscopic comparison
- Microscopic Comparison
  - Determine if the fired bullets and / or cartridge cases were fired from / in the same firearm
- Serial Number Restoration
  - o Make an obliterated serial number visible. Used for tracing the firearm
- Distance Determination
  - Determine the distance the muzzle of the firearm was from the target at the time
    of firing
- General Rifling Characteristics (GRC)
  - For fired bullets
  - Provide a list of firearm manufacturers that could have fired the bullet.
    Investigative lead only
- National Integrated Ballistic Information Network (NIBIN)
  - Database that stores images of fired cartridge cases and automates evaluations to provides actionable investigative leads in a timely manner
  - o Fired Cartridge Cases Only
  - o Pistols, Autoloading Rifles, 12 Gauge Shotguns Only
    - Note: Revolvers, Single-Shot firearms, and bullets do not qualify for NIBIN entry

# **NIBIN**

- The lab can test-fire the firearm, or the agency may submit the test-fired cartridges
  - o Collect at least two (2) fired cartridge cases from each test fired firearm
    - Package in an envelope, paper bag, or small box
    - Tape Seal, Initial and Date the tape seal, and Label the packaging with contents

- Ex) Two (2) fired 12 Gauge shotshells from 12 Gauge Remington model 1100 semi-automatic shotgun with serial number: ABC123
- Complete NIBIN entry form
- Complete evidence submission form
- o Test fired bullets can be packaged with test fired cartridge cases if collected
  - It is not necessary to collect bullets unless microscopic comparisons are required