



# AUDIT OF COMPLIANCE WITH STANDARDS GOVERNING COMBINED DNA INDEX SYSTEM ACTIVITIES AT THE PRINCE GEORGE'S COUNTY POLICE DEPARTMENT CRIME LABORATORY PRINCE GEORGE'S COUNTY, MARYLAND

U.S. Department of Justice Office of the Inspector General Audit Division

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# AUDIT OF COMPLIANCE WITH STANDARDS GOVERNING COMBINED DNA INDEX SYSTEM ACTIVITIES AT THE PRINCE GEORGE'S COUNTY POLICE DEPARTMENT CRIME LABORATORY PRINCE GEORGE'S COUNTY, MARYLAND

#### **EXECUTIVE SUMMARY**

The Department of Justice, Office of the Inspector General (OIG), Audit Division, has completed an audit of compliance with standards governing Combined DNA Index System (CODIS) activities at the Prince George's County Police Department Crime Laboratory (Laboratory).

#### **Background**

The Federal Bureau of Investigation's (FBI) CODIS program combines forensic science and computer technology to provide an investigative tool to federal, state, and local crime laboratories in the United States, as well as those from select international law enforcement agencies. The CODIS program allows these crime laboratories to compare and match DNA profiles electronically, to assist law enforcement in solving crimes and identify missing or unidentified persons.<sup>1</sup> The FBI's CODIS Unit manages CODIS, as well as develops, supports, and provides the program to crime laboratories to foster the exchange and comparison of forensic DNA evidence.

The FBI implemented CODIS as a distributed database with hierarchical levels that enable federal, state, and local crime laboratories to compare DNA profiles electronically. The hierarchy consists of three distinct levels that flow upward from the local level to the state level and then, if allowable, the national level. National DNA Index System (NDIS), the highest level in the hierarchy, is managed by the FBI as the nation's DNA database containing DNA profiles uploaded by law enforcement agencies across the United States. NDIS enables the laboratories participating in the CODIS program to electronically compare DNA profiles on a national level. The State DNA Index System (SDIS) is used at the state level to serve as a state's DNA database containing DNA profiles from local laboratories and state offenders. The Local DNA Index System (LDIS) is used by local laboratories.

<sup>&</sup>lt;sup>1</sup> DNA, or deoxyribonucleic acid, is genetic material found in almost all living cells that contains encoded information necessary for building and maintaining life. Approximately 99.9 percent of human DNA is the same for all people. The differences found in the remaining 0.1 percent allow scientists to develop a unique set of DNA identification characteristics (a DNA profile) for an individual by analyzing a specimen containing DNA.

# **OIG Audit Objectives**

Our audit generally covered the period from July 2008 through August 2010. The objectives of our audit were to determine if: (1) Prince George's County Police Department Laboratory was in compliance with the NDIS participation requirements; (2) the Laboratory was in compliance with the Quality Assurance Standards (QAS) issued by the FBI; and (3) the Laboratory's forensic DNA profiles in CODIS databases were complete, accurate, and allowable for inclusion in NDIS. We noted the following during our audit:

- The Laboratory was not in compliance with the NDIS security requirement that CODIS backups are stored in a secure, locked container.
- The Laboratory did not confirm one match we reviewed, and failed to confirm two of its matches within the advised 30-day period.<sup>2</sup> Furthermore, the Laboratory failed to notify Prince George's County Police Department investigators of a match confirmation in two additional matches we reviewed, and in another instance, notified investigators over 2 weeks after the match was confirmed.
- The Laboratory complied with FBI Quality Assurance Standards to ensure security of DNA evidence within its freezers, but it did not resolve one of the 2008 QAS review findings that required corresponding language for its Quality Assurance Manual.

In addition, we determined that 81 out of 100 profiles were complete, accurate, and allowable for inclusion in NDIS, while 19 profiles were unallowable. The Laboratory removed all 19 profiles from NDIS.<sup>3</sup> These 19 profiles included 2 that did not contain enough case information and 16 that were not allowable for upload into NDIS. For the final profile, the Laboratory did not obtain an elimination standard for the victim. According to the FBI, the profile would be allowable in NDIS if a request is made for such a standard; however, the Laboratory elected to remove the profile from NDIS until it received the elimination standard. Furthermore, although we found that the GeneScan<sup>®</sup> data we reviewed for 10 of the 100 profiles indicated that the negative controls were amplified as appropriate, we had to request additional profiles because several of the GeneScan<sup>®</sup> printouts in the original

<sup>&</sup>lt;sup>2</sup> A fourth match was confirmed after 30 days, but we found that the delay was caused by a laboratory outside the scope of our review.

<sup>&</sup>lt;sup>3</sup> Of the 19 profiles we deemed unallowable, 15 were analyzed by the same technician at the laboratory.

sample were unavailable due to technical problems with the Macintosh computer utilized by the Laboratory.

We made six recommendations to address the Laboratory's compliance with standards governing CODIS activities, which are discussed in detail in the Findings and Recommendations section of the report. Our audit objectives, scope, and methodology are detailed in Appendix I of the report and the audit criteria are detailed in Appendix II.

We discussed the results of our audit with Laboratory officials, who implemented corrective action prior to the release of this report.

# **TABLE OF CONTENTS**

INTRODUCTION	
Background	
OIG Audit Objectives	
Legal Foundation for CODIS	
CODIS Structure	
Laboratory Information	5
FINDINGS AND RECOMMENDATIONS	7
I. Compliance with NDIS Participation Requirements	7
II. Compliance with the Quality Assurance Standards1	1
III. Appropriateness of Forensic DNA Profiles in CODIS Databases15	5
APPENDIX I: OBJECTIVES, SCOPE, AND METHODOLOGY 20	)
APPENDIX II: AUDIT CRITERIA2	3
NDIS Participation Requirements23	3
Quality Assurance Standards24	4
Office of the Inspector General Standards2!	5
APPENDIX III: LABORATORY RESPONSE TO THE DRAFT REPORT 27	7
APPENDIX IV: THE FEDERAL BUREAU OF INVESTIGATION RESPONSE TO THE DRAFT REPORT	)
APPENDIX V: OFFICE OF INSPECTOR GENERAL ANALYSIS AND SUMMARY OF ACTIONS NECESSARY TO CLOSE THE REPORT 3°	1

#### INTRODUCTION

The Department of Justice, Office of the Inspector General, Audit Division, has completed an audit of compliance with standards governing Combined DNA Index System (CODIS) activities at the Prince George's County Police Department Crime Laboratory (Laboratory).

# **Background**

The Federal Bureau of Investigation's (FBI) CODIS provides an investigative tool to federal, state, and local crime laboratories in the United States using forensic science and computer technology. The CODIS program allows these laboratories to compare and match DNA profiles electronically, thereby assisting law enforcement in solving crimes and identifying missing or unidentified persons.<sup>1</sup> The FBI's CODIS Unit manages CODIS and is responsible for its use in fostering the exchange and comparison of forensic DNA evidence.

# **OIG Audit Objectives**

Our audit generally covered the period from July 2008 through August 2010. The objectives of our audit were to determine if: (1) the Laboratory was in compliance with the National DNA Index System (NDIS) participation requirements; (2) the Laboratory was in compliance with the Quality Assurance Standards (QAS) issued by the FBI; and (3) the Laboratory's forensic DNA profiles in CODIS databases were complete, accurate, and allowable for inclusion in NDIS. Appendix I contains a detailed description of our audit objectives, scope, and methodology, while the criteria used to conduct our audit are presented in Appendix II.

<sup>&</sup>lt;sup>1</sup> DNA, or deoxyribonucleic acid, is genetic material found in almost all living cells that contains encoded information necessary for building and maintaining life. Approximately 99.9 percent of human DNA is the same for all people. The differences found in the remaining 0.1 percent allow scientists to develop a unique set of DNA identification characteristics (a DNA profile) for an individual by analyzing a specimen containing DNA.

# **Legal Foundation for CODIS**

The FBI began the CODIS program as a pilot project in 1990. The DNA Identification Act of 1994 (Act) authorized the FBI to establish a national index of DNA profiles for law enforcement purposes. The Act, along with subsequent amendments, has been codified in a federal statute (Statute) providing the legal authority to establish and maintain NDIS.<sup>2</sup>

#### Allowable DNA Profiles

The Statute authorizes NDIS to contain the DNA identification records of persons convicted of crimes, persons who have been charged in an indictment or information with a crime, and other persons whose DNA samples are collected under applicable legal authorities. Samples voluntarily submitted solely for elimination purposes are not authorized for inclusion in NDIS. The Statute also authorizes NDIS to include analysis of DNA samples recovered from crime scenes or from unidentified human remains, as well as those voluntarily contributed from relatives of missing persons.

#### Allowable Disclosure of DNA Profiles

The Statute requires that NDIS only include DNA information that is based on analyses performed by or on behalf of a criminal justice agency – or the U.S. Department of Defense – in accordance with QAS issued by the FBI. The DNA information in the index is authorized to be disclosed only: (1) to criminal justice agencies for law enforcement identification purposes; (2) in judicial proceedings, if otherwise admissible pursuant to applicable statutes or rules; (3) for criminal defense purposes, to a defendant who shall have access to samples and analyses performed in connection with the case in which the defendant is charged; or (4) if personally identifiable information (PII) is removed for a population statistics database, for identification research and protocol development purposes, or for quality control purposes.

-2-

<sup>&</sup>lt;sup>2</sup> 42 U.S.C.A. § 14132 (2006).

#### **CODIS Structure**

LDIS Laboratories (partial list):

San Diego Police Department

Orange County Sheriff's Department

San Bernardino County Sheriff's Department

The FBI implemented CODIS as a distributed database with hierarchical levels that enables federal, state, and local crime laboratories to compare DNA profiles electronically. CODIS consists of a hierarchy of three distinct levels: (1) NDIS is managed by the FBI as the nation's DNA database containing DNA profiles uploaded by participating states, (2) the State DNA Index System (SDIS) is used at the state level to serve as a state's DNA database containing DNA profiles from local laboratories within the state and state offenders, and (3) the Local DNA Index System (LDIS) is used by local laboratories. DNA profiles originate at the local level and then flow upward to the state and, if allowable, national level. For example, the local laboratory in the Palm Beach County, Florida, Sheriff's Office sends its profiles to the state laboratory in Tallahassee, which then uploads the profiles to NDIS. Each state participating in CODIS has one designated SDIS laboratory. The SDIS laboratory maintains its own database and is responsible for overseeing NDIS issues for all CODIS-participating laboratories within the state. The graphic below presents an example of how the system hierarchy works.

SDIS
Laboratory
Richmond, CA

LDIS Laboratories (partial list):
DuPage County Sheriff's Office
Illinois State Police, Chicago
Illinois State Police, Rockford

**Exhibit 1: Example of System Hierarchy within CODIS** 

LDIS Laboratories (partial list):

Palm Beach County Sheriff's Office

Broward County Sheriff's Office

Miami-Dade Police Department

# National DNA Index System

NDIS is the highest level in the CODIS hierarchy and enables the laboratories participating in the CODIS program to electronically compare DNA profiles on a national level. NDIS does not contain names or other PII about the profiles. Therefore, matches are resolved through a system of laboratory-to-laboratory contacts. Within NDIS are eight searchable indices discussed below.

- <u>Convicted Offender Index</u> contains profiles generated from persons convicted of qualifying offenses.<sup>3</sup>
- Arrestee Index is comprised of profiles developed from persons who have been arrested, indicted, or charged in an information with a crime.
- <u>Legal Index</u> consists of profiles that are produced from DNA samples collected from persons under other applicable legal authorities.<sup>4</sup>
- <u>Detainee Index</u> contains profiles from non-U.S. persons detained under the authority of the U.S. and required by law to provide a DNA sample for analysis and entry into NDIS.
- <u>Forensic Index</u> profiles originate from, and are associated with, evidence found at crime scenes.
- <u>Missing Person Index</u> contains known DNA profiles of missing persons and deduced missing persons.
- <u>Unidentified Human (Remains) Index</u> holds profiles from unidentified living individuals and the remains of unidentified deceased individuals.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> The phrase "qualifying offenses" is used here to refer to local, state, or federal crimes that require a person to provide a DNA sample in accordance with applicable laws.

<sup>&</sup>lt;sup>4</sup> An example of a Legal Index profile is one from a person found not guilty by reason of insanity, who is required by the relevant state law to provide a DNA sample.

<sup>&</sup>lt;sup>5</sup> An example of an Unidentified Human (Remains) Index profile from a living person is a profile from a child or other individual, who cannot or refuses to identify themselves.

 Relatives of Missing Person Index is comprised of DNA profiles generated from the biological relatives of individuals reported missing.

Although CODIS is comprised of multiple indices or databases, the two main functions of the system are to: (1) generate investigative leads that may help in solving crimes, and (2) identify missing and unidentified persons.

The Forensic Index generates investigative leads in CODIS that may help solve crimes. Investigative leads may be generated through matches between the Forensic Index and other indices in the system, including the Convicted Offender, Arrestee, and Legal Indices. These matches may provide investigators with the identity of suspected perpetrators. CODIS also links crime scenes through matches between Forensic Index profiles, potentially identifying serial offenders.

In addition to generating investigative leads, CODIS furthers the objectives of the FBI's National Missing Person DNA Database program through its ability to identify missing and unidentified individuals. Those persons may be identified through matches between indices in CODIS, such as, through matches between the profiles in the Missing Persons Index and the Unidentified Human (Remains) Index. The profiles within the Missing Persons and Unidentified Human (Remains) Indices may also be vetted against the Forensic, Convicted Offender, Arrestee, and Legal Indices to provide investigators with leads in solving missing and unidentified persons cases.

#### State and Local DNA Index System

The FBI provides CODIS software free of charge to any state or local law enforcement laboratory performing DNA analysis. Laboratories are able to use the CODIS software to upload profiles to NDIS. However, before a laboratory is allowed to participate at the national level and upload DNA profiles to NDIS, a Memorandum of Understanding (MOU) must be signed between the FBI and the applicable state's SDIS laboratory. The MOU defines the responsibilities of each party, includes a sublicense for the use of CODIS software, and delineates the standards laboratories must meet in order to utilize NDIS. Although officials from LDIS laboratories do not sign an MOU, LDIS laboratories that upload DNA profiles to an SDIS laboratory are required to adhere to the MOU signed by the SDIS laboratory.

States are authorized to upload DNA profiles to NDIS based on local, state, and federal laws, as well as NDIS regulations. However, states or localities may maintain NDIS-restricted profiles in SDIS or LDIS. For instance, a local law may allow for the collection and maintenance of a victim profile at LDIS, but NDIS regulations do not authorize the upload of that profile to the national level.

The utility of CODIS relies upon the completeness, accuracy, and quantity of profiles that laboratories upload to the system. Incomplete CODIS profiles are those for which the required number of core loci were not tested or do not contain all of the DNA information that resulted from a DNA analysis and may not be searched at NDIS. The probability of a false match among DNA profiles is reduced as the completeness of a profile increases. Inaccurate profiles, which contain incorrect DNA information or an incorrect specimen number, may generate false positive leads, false negative comparisons, or lead to the misidentification of a sample. CODIS becomes more useful as the quantity of DNA profiles in the system increases because the potential for additional leads rises. However, laws and regulations exclude certain types of profiles from being uploaded to CODIS to prevent violations to an individual's privacy and foster the public's confidence in CODIS. Therefore, it is the responsibility of the Laboratory to ensure that it is adhering to the NDIS participation requirements and the profiles uploaded to CODIS are complete, accurate, and allowable for inclusion in NDIS.

# **Laboratory Information**

The Prince George's County Police Department Crime Laboratory participates in the CODIS program as a Local DNA Indexing System (LDIS) laboratory responsible for serving Prince George's County and its municipalities. Prince George's County re-opened its DNA laboratory and began uploading profiles to the State DNA Indexing System (SDIS) in March 2009. The Laboratory analyzes only forensic samples, and has outsourced this responsibility to both Baltimore Rh Typing Laboratory (BRT) and Bode Technologies (Bode). While the Laboratory continues to contract with Bode, BRT was no longer being used as a vendor as of March 2009. The Laboratory is accredited by the American Society of Crime Laboratory Directors.

<sup>&</sup>lt;sup>6</sup> The Laboratory was offline from NDIS between April 2007 and January 2009. In January 2009, the FBI deemed the Laboratory to be in compliance with QAS standards and approved their participation in NDIS. During our review, we were told that the Laboratory waited until March 2009 before running at full capacity.

#### FINDINGS AND RECOMMENDATIONS

# I. Compliance with NDIS Participation Requirements

We determined that the Laboratory was generally in compliance with NDIS participation requirements we reviewed. However, we found that the Laboratory did not fully meet NDIS requirements in two areas. First, the Laboratory does not secure its CODIS backup data, stored on an external hard drive, in a locked container. Second, the Laboratory does not confirm all its NDIS matches or notify its investigators of the matches in a timely manner.

The NDIS participation requirements, which consist of the MOU and the NDIS Procedure Manual, establish the responsibilities and obligations of laboratories that participate in the CODIS program at the national level. The MOU describes the CODIS-related responsibilities of both the Laboratory and the FBI. The NDIS Procedure Manual is comprised of the NDIS operational procedures and provides detailed instructions for laboratories to follow when performing certain procedures pertinent to NDIS. The NDIS participation requirements we reviewed are described in more detail in Appendix II of this report.

#### **Results of the OIG Audit**

The audit team noted two exceptions to the Laboratory's compliance with the NDIS participation requirements. We found that the Laboratory uses external hard drives for their weekly back-up of CODIS data, and these hard drives are not stored in a locked container as required by NDIS Security Requirements. Additionally, we reviewed 13 NDIS matches involving the Laboratory and found that 2 were not confirmed in a timely manner, and a third was not confirmed. For 2 other matches we reviewed, notification of the match confirmation was not provided to investigators, and another match was provided to investigators over 2 weeks after the Laboratory had confirmed the match. We believe that the Laboratory's delay in its confirmation of the matches are in violation of NDIS procedures, and we are concerned that its delay in notifying investigators in a timely manner could potentially lead to the suspected perpetrator committing additional crimes. The results of our audit are described in more detail below.

<sup>&</sup>lt;sup>7</sup> A fourth match was confirmed after 30 days, but we found that the delay was caused by a laboratory outside the scope of our review.

#### NDIS Back-up Physical Security

The Laboratory uses two external hard drives for its weekly back up of CODIS data.<sup>8</sup> The Laboratory uploads the information to CODIS on Thursday and then creates a backup to one of the hard drives on Friday. The hard drive is then transported to a secure, off-site location for storage. A second hard drive, which had stored the previous week's back-up, is brought back to the Laboratory and is stored with the server in a locked CODIS room, but is not stored in a separate, locked container. According to NDIS guidelines, the CODIS back-up needs to be stored in a locked container, "electronic media on which CODIS data (backups) is stored shall be maintained in a lockable container."

#### NDIS Match Procedures

The Laboratory is responsible for identifying matches via NDIS and to notify the investigators designated to a case of a match. We reviewed 13 of the universe of 322 identified matches. The sample selected was tested for timeliness in both match confirmation and notification of investigators. Of these 13, the Laboratory was untimely in confirming 2 matches based on the NDIS procedures, which state that laboratories are required to make a "best effort" to disposition matches within 30 business days. In addition, the Laboratory did not confirm the names for a third match we reviewed. 9 For two other matches, as of September 2010, the Laboratory had not notified the investigators of the match confirmation, while another match was provided over 2 weeks after confirmation. 10 As shown in Exhibit 2, the Laboratory did not request confirmation for the matches quickly enough, leading to a delay between match, confirmation, and notification of the investigators. Untimely notification of the investigators may result in the suspected perpetrator committing additional and possibly more egregious crimes.

<sup>&</sup>lt;sup>8</sup> The Laboratory currently has funding for a server that will allow the Laboratory to more efficiently back up CODIS data, but as of August 2010 the server was not yet installed.

<sup>&</sup>lt;sup>9</sup> A fourth match was confirmed after 30 days, but we found that the delay was caused by a laboratory outside the scope of our review.

We found that the match that was untimely in its notification of investigators was also confirmed after 30 days. However, we noted that the delay in confirmation was caused by a laboratory outside the scope of our review.

**Exhibit 2: Timeliness of NDIS Match Procedures** 

	Business Days Greater than 30 Day Match	Business Days Greater than 10 Day Investigator
Match ID	Confirmation Timeframe	Notification Timeframe
DC0000164072 <sup>11</sup>	No confirmation	-
DC0000157811	6 <sup>12</sup>	7
DC0000158116	-	No notification
		Notification 20 days before
DC0000140865	37	confirmation
DC0000149694	33 <sup>13</sup>	N/A <sup>14</sup>
DC0000133744	17	-
DC0000158160	-	No notification

Source: OIG Analysis of Laboratory Case files

We had no significant concerns with regard to the Laboratory's compliance with the other NDIS participation requirements we reviewed, as described below.

- All Laboratory personnel were provided with NDIS Procedures
  Manual, in addition to being available on the Criminal Justice
  Information System Wide Area Network. Furthermore, the CODIS
  administrator was responsible for informing the Laboratory CODIS
  users of any new procedures implemented.
- We contacted the FBI to verify that all Laboratory CODIS users were up-to-date with training. All three CODIS users have completed NDIS training for 2010, and matched the list provided by the Laboratory.

<sup>&</sup>lt;sup>11</sup> This match was not confirmed. The case was solved but NDIS procedures require that in the case of a match to a solved case, names must be exchanged. Although the Prince George's County investigator was not interested in verifying the name, the requirements appear to necessitate verification of the name.

<sup>&</sup>lt;sup>12</sup> Though the match confirmation took longer than 30 days, we noted in our review that the Laboratory was not at fault; the laboratory responsible for confirming the match was external to our review.

<sup>&</sup>lt;sup>13</sup> Though the match confirmation took longer than 30 days, we noted in our review that the Laboratory was not at fault; the laboratory responsible for confirming the match was external to our review.

<sup>&</sup>lt;sup>14</sup> No notification was necessary because it was a "Conviction Match," (i.e., the Laboratory's forensic profile was associated with a solved case and matched another Laboratory's convicted offender profile).

- We verified that all Laboratory CODIS users submitted FBI required documentation for access to CODIS.
- We reviewed the Laboratory procedures in its Quality Assurance Manual (QAM) for maintaining personnel training and qualification records, and found that personnel training records are kept indefinitely. Training records are filed and kept for reference in the CODIS Administrator's office.
- We verified the Laboratory forwarded its QAS review to the state CODIS administrator within 30 days, but not the NDIS custodian as established by NDIS QAS Audit procedures. Because the state CODIS administrator did not forward the QAS review to NDIS within the 30 day timeframe, the Laboratory was considered late on its requirement. Therefore, Laboratory personnel stated they would send all future QAS audits directly to NDIS while including the state CODIS administrator on the correspondence.

#### Conclusion

We found that the Laboratory was not in compliance with the NDIS security requirement that it store on-site CODIS backup in a secure, locked container. Also, the Laboratory failed to confirm three of its matches within the advised 30 day period, and in three instances, did not notify Prince George's County Police Department investigators of the NDIS match in a timely manner. As a result, we made two recommendations.

#### Recommendations

We recommend that the FBI:

- 1. Direct the Laboratory to store its on-site backup hard drive in a locked container.
- 2. Direct the Laboratory to implement a policy for confirming matches within the 30-day period as well as notifying investigators in a timely manner.

# II. Compliance with the Quality Assurance Standards

We found that the Laboratory generally complied with the Quality Assurance Standards issued by the FBI that we reviewed. Specifically, we found that (1) security at the Laboratory was adequate, (2) DNA evidence was properly locked and accounted for, (3) protocols were followed with regard to the separation of known and unknown samples, and (4) Quality Assurance Standards reviews were performed within designated timeframes. We noted one issue, in which the Laboratory failed to insert language into its Quality Assurance Manual in accordance with its 2008 Quality Assurance Standards review.

During our audit, we considered the Forensic Quality Assurance Standards (QAS) issued by the FBI.<sup>15</sup> These standards describe the quality assurance requirements that the Laboratory must follow to ensure the quality and integrity of the data it produces. We also assessed the two most recent QAS reviews that the laboratory underwent.<sup>16</sup> The QAS we reviewed are listed in Appendix II.

#### **Results of the OIG Audit**

We noted one exception to the Laboratory's compliance with the Forensic QAS. Specifically, we found that the Laboratory failed to resolve one of the 2008 QAS review findings which required language regarding locked DNA evidence freezers in its Quality Assurance Manual (QAM). The results of our audit are described in more detail below.

#### Written QAM Policy for DNA Freezers

We examined the two most recent QAS reviews conducted on the Laboratory: (1) the October 6-8, 2008, external QAS review; and (2) the September 16-17, 2009, internal QAS review. The external QAS review issued six findings, and the Laboratory provided a response to all of the

<sup>&</sup>lt;sup>15</sup> Forensic Quality Assurance Standards refers to the Quality Assurance Standards for Forensic DNA Testing Laboratories, effective July 1, 2009.

The QAS require that laboratories undergo annual audits. Every other year, the QAS requires that the audit be performed by an external agency that performs DNA identification analysis and is independent of the laboratory being reviewed. These audits are not required by the QAS to be performed in accordance with *Government Auditing Standards* (GAS) and are not performed by the Department of Justice Office of the Inspector General. Therefore, we will refer to the QAS audits as reviews (either an internal laboratory review or and external laboratory review, as applicable) to avoid confusion with our audits that are conducted in accordance with GAS.

findings. The internal QAS review did not note any new findings or, repeat deficiencies from the external review.

One of the recommendations issued in the 2008 external QAS review stated that extracted DNA evidence was stored in an unlocked freezer which did not constitute a secure container. Accordingly, the Laboratory responded that it would address the finding by adding the following policy to its QAM, "All freezers containing DNA extracts will be locked at all times." Though we noted during our tour that the Laboratory secures the freezers, the QAM does not include the requirement the Laboratory specified in their response to the external audit. We believe the requirement regarding the security of the freezers should be contained in the QAM.

We found that the Laboratory complied with the other QAS we reviewed, as described below.

- We verified that QAS reviews were conducted on the Laboratory.
  The Laboratory had an external QAS review performed in October
  2008 and an internal QAS review in September 2009. This is in
  accordance with QAS Standard 15, which directs labs to have a
  review performed every year, but once every 2 years must undergo
  an external review.
- We contacted the external QAS reviewer from the 2008 QAS review and received a signed auditor independence statement for the period in question.
- We toured the Laboratory and found that access to the facility is secured via video surveillance, posted personnel at entrances, and limited public access. Furthermore, the Laboratory was secured with a separate, locked, and alarmed door. We also reviewed the QAM, which provided policies on physical security of the facility, the Laboratory and the evidence locker room, and assigning keys necessary to access the secured areas.
- We reviewed the Laboratory policies for evidence security and found that the procedures the Laboratory has in place to ensure accurate entry into CODIS were adequate. Furthermore, it has appropriate policies in place to protect, store, and secure evidence.

- We reviewed the policies and procedures the Laboratory implements regarding the separation of known and unknown DNA samples in accordance with the QAS standards. According to the QAM, standard and evidence samples must be separated by time and space. We did not identify any material deficiencies with regard to the Laboratory's separation of known and unknown DNA samples.
- We examined the Laboratory policy for retaining samples, and found that the Laboratory retains sample extracts indefinitely and controls them via authorized access and secured storage. The extracts and evidence samples are held long-term in the Laboratory freezer, and if the Laboratory must return the evidence from the large pieces which the DNA samples were taken, they are sent back to the property division, which is housed in a separate facility.
- We found that the Laboratory has outsourced work to Bode Technology Group (Bode) and Baltimore RH Typing (BRT) Laboratories. The Laboratory no longer contracted with BRT at the time of our review, but continues to contract with Bode through the Maryland State Police. We received accreditation and audit documentation for both vendors for relevant years. The Laboratory provided contracts for both Bode and BRT; we reviewed the contracts and did not note any requirements that were not met.
- We reviewed the Laboratory procedures for verifying vendor work and found that 100 percent of the outsourced profiles are provided with a technical review, and documented. During the course of our profile review, those profiles that had been contracted out, all had a technical review included in the file.
- We reviewed the site visit documentation for both vendors utilized by the Laboratory during the 2 years prior to our audit and found that the on-site visits were conducted for the relevant years for both BRT and Bode. The site visit documentation indicated only one issue for Bode, but the issue was resolved and it did not appear in subsequent years. Furthermore, the BRT site visits pointed to an audit containing six findings, all of which the Laboratory responded to. In our interview with the Laboratory, they stated there were no issues with either of their vendors.

#### Conclusion

We found that the Laboratory complied with the FBI Quality Assurance Standards we reviewed, with one exception. Though the Laboratory implemented procedures to ensure security of DNA evidence within its freezers, it did not resolve one of the 2008 QAS review findings that required corresponding language for its Quality Assurance Manual. As a result, we made one recommendation.

#### Recommendations

We recommend that the FBI:

3. Direct that the Laboratory insert a written policy in its QAM regarding the locking of all freezers containing DNA extracts, which reads: "All freezers containing DNA extracts will be locked at all times."

# III. Appropriateness of Forensic DNA Profiles in CODIS Databases

We determined that 19 of the 100 profiles we reviewed were unallowable for upload into NDIS. The 19 profiles included 2 that did not contain enough case information to ascertain the reason for allowability; 16 that were not allowable for upload into NDIS based on various factors including: samples obtained from the suspect's person or residence, samples obtained from a location the suspect would likely have left DNA evidence by means not connected with the crime, and samples that were not directly attributable to the crime; and 1 that did not have an elimination standard for the victim. The Laboratory agreed with our findings and removed all 19 profiles from NDIS. We noted that 15 of the 19 profiles determined to be unallowable for upload to NDIS were analyzed by the same technician at the Laboratory. Furthermore, several of the GeneScan® printouts that we requested for review were unavailable due to technical problems with the Macintosh computer utilized by the Laboratory.

We reviewed a sample of the Laboratory's forensic DNA profiles to determine whether each profile was complete, accurate, and allowable for inclusion in NDIS.<sup>17</sup> To test the completeness and accuracy of each profile, we established standards that require a profile include all the loci for which the analyst obtained results, and that the values at each locus match those identified during analysis.<sup>18</sup> Our standards are described in more detail in Appendix II of this report.

The NDIS operational procedures establish the DNA data acceptance standards by which laboratories must abide. These procedures prohibit a laboratory from uploading forensic profiles to NDIS that clearly match the DNA profile of the victim or another known person, unless the known person is a suspected perpetrator. The NDIS procedures we reviewed are described in more detail in Appendix II of this report.

<sup>&</sup>lt;sup>17</sup> When a laboratory's universe of DNA profiles in NDIS exceeds 1,500, our sample is taken from SDIS rather than directly from NDIS. See Appendix I for further description of the sample selection.

<sup>&</sup>lt;sup>18</sup> A "locus" is a specific location on a chromosome. The plural form of locus is loci.

#### **Results of OIG Audit**

We selected a sample of 100 profiles out of the 753 forensic profiles the Laboratory had uploaded to NDIS as of July 2, 2010. Of the 100 forensic profiles sampled, we found 19 were unallowable for upload to NDIS. The remaining profiles sampled were complete, accurate, and allowable for inclusion in NDIS. The specific exceptions are explained in more detail below.

# Profile Allowability

Based on our review, we found that 19 of the 100 profiles in the sample we selected were unallowable for upload into NDIS, while the remaining 81 profiles we found to be complete, accurate, and allowable. We examined each profile in the sample to determine allowability based on NDIS guidelines such as: (1) whether a crime was committed; (2) whether the profile was obtained from the crime scene; (3) whether the profile was attributable to a putative perpetrator; and (4) whether there was a suspect in the case. 19 Of the unallowable profiles that we identified, two did not contain enough, or any, information in the case file to determine the exact nature of the crime and whether the sample was obtained in an allowable fashion. Additionally, 16 profiles were deemed unallowable for various reasons including, samples obtained from the suspect's person or residence; samples obtained from a location the suspect would likely have left DNA evidence by means not connected with the crime, such as a significant other's residence; and samples that were not directly attributable to the crime. Furthermore, the final profile we deemed unallowable was missing an elimination standard. According to the FBI, if the Laboratory makes and documents efforts to obtain the elimination standards, but determines that elimination standards are unavailable, the profile may be uploaded to NDIS. Although the Laboratory requested the elimination standard during the course of our audit, they elected to remove the profile until they received the elimination standard. The results of our review are noted in Exhibit 3 below:

<sup>&</sup>lt;sup>19</sup> If there is a suspect in the case and the profile was taken directly from the suspect's person or possession, the profile would not be allowable for upload into NDIS because a suspect would be expected to have his or her own DNA on objects in their possession, independent of the crime.

Exhibit 3: Questioned Profiles Removed from the Prince George's County Police Department Crime Laboratory

Sample	
Number	Reason for Exception
CA-04	Sample collected from vehicle used by the suspect at the time of the
	crime; therefore, reasonable to expect profile to be present independent
	of the crime.
CA-09	Case file did not contain the necessary background information on the
	specifics of the crime.
CA-16	Sample collected during a search warrant at the suspect's residence. It
	was reasonable to expect evidence to be present independent of the
	crime.
	Samples in file were all known; no unknown samples present in the
	case file. Requested additional information, but the Laboratory was
CA-18	unable to provide it. Removed from NDIS.
CA-22	Sample collected from object at suspect's residence. It was reasonable
	to expect profile to be present independent of the crime.
	Car used in the commission of a crime, but the owner was never
	identified because the car was stolen. The profile did not match the
CA-26	suspects, and as such, an attempt to retrieve an elimination standard
	for car owner was deemed necessary. Laboratory has requested
	additional information; can re-enter if information shows allowability or
CA 20	if request is documented and standard is not available.
CA-29	Sample taken off the suspect's person.
CA 22	Did not have the necessary case information. Laboratory has requested
CA-32 CA-34	additional information; can re-enter if information shows allowability.
	Case file was unable to link the sample with the crime.
CA-36	Sample not attributable to the putative perpetrator.
CA-38	Case file was unable to link the sample with the crime.
CA-40	No elimination standard provided for victim. We noted to Laboratory
CA-40	that profile allowable upon request of standard and documentation.  Sample collected from suspect's vehicle that was used in a vehicular
CA-40	manslaughter case; therefore, reasonable to expect profile to be
	present in suspect's own car independent of the crime.
CA-49	Sample not attributable to the putative perpetrator.
CA-51	Sample collected during a search warrant at suspect's residence.
CA-56	Case file was unable to link the sample with the crime.
CA-62	Sample collected from vehicle belonging to the suspect's wife.
CA-69	Sample collected during a search/seizure where suspect resided.
5/( 5 /	Sample collected during a scarcin/scizare where suspect resided.  Sample collected from foot of victim at the crime scene; the scene took
CA-75	place at the residence shared by the suspect and victim. It was
3,7,7	reasonable to expect evidence to be present independent of the crime.
	aco Coorgo's Police Department Crime Laboratory and OIC Analysis

Source: Prince George's Police Department Crime Laboratory and OIG Analysis

We analyzed the 19 unallowable profiles and determined 15 of 19 unallowable profiles were processed by a single technician. The majority of the 19 profiles were uploaded prior to the issuance of the FBI's 2006 guidance, which provided specific detail on the allowability of profiles being uploaded into NDIS. In lieu of the Laboratory implementing the laborintensive process of reviewing all profiles uploaded by the technician in question, we recommend the Laboratory make a change to its profile suitability review, which denotes the reason for the each profile's allowability in NDIS. Specifically, we recommend the Laboratory document the profile suitability review for all future profiles that are uploaded into NDIS. This profile suitability review documentation would require that analysts indicate on a check off sheet why the profile is allowable (such as was the sample from a crime scene or was the sample an unknown). Additionally, we recommend the Laboratory implement a policy in its QAM that requires analysts to document the review of the suitability documentation during its match resolution process. The additional review will help to ensure that if older, unallowable profiles did produce a match in the future, it will not be reported and will be deleted from NDIS at that time.

# GeneScan® Data Review

During our audit, we took a judgmental sample of 10 profiles from the 100 profile sample in order to review the GeneScan® data to ensure that negative controls were amplified during the analysis. However, we had to revise our sample because some of the GeneScan® printouts we originally selected were unavailable because the Macintosh computer necessary to access and print the GeneScan® data was broken and could not be repaired. Therefore we revised our sample and included all but one forensic analyst that conducted analysis on our sample profiles. All 10 of the GeneScan® printouts we sampled indicated the personnel had appropriately amplified the negative controls during analysis. We recommend that the Laboratory create and implement a policy or procedure for a contingency plan used in cases of faulty equipment; specifically, the Macintosh computer necessary to access the GeneScan® data for some profiles.

The GeneScan® printouts for one analyst were unavailable because the Laboratory informed us that the analyst did not work for Prince George's County Police Department; the analyst worked for one of the vendor laboratories, and therefore the documents were unavailable.

#### Conclusion

We found that 19 of the 100 profiles in the sample we selected were unallowable for upload into NDIS, while the remaining 81 profiles we found to be complete, accurate, and allowable. The Laboratory removed all 19 profiles from NDIS. In reviewing the 19 unallowable profiles we determined that 15 of the 19 unallowable profiles were analyzed by the same technician at the Laboratory. Additionally, although we found that GeneScan® data we reviewed indicated the negative controls were amplified as appropriate, several GeneScan® printouts we requested were unavailable due to technical problems with the Macintosh computer utilized by the lab. As a result of these findings, we made three recommendations.

#### Recommendations

We recommend that the FBI:

- 4. Direct that the Laboratory document the profile suitability review for all future profiles that are uploaded into NDIS.
- 5. Direct that the Laboratory implement a policy in its QAM that requires analysts to document the review of the profile suitability documentation during its match resolution process.
- 6. Direct that the Laboratory create and implement a policy or procedure for a contingency plan used in future cases of faulty equipment; specifically, the Macintosh computer necessary to run GeneScan® printouts.

#### APPENDIX I

# **OBJECTIVES, SCOPE, AND METHODOLOGY**

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit generally covered the period from July 2008 through August 2010. The objectives of the audit were to determine if the: (1) Laboratory was in compliance with the NDIS participation requirements; (2) Laboratory was in compliance with the Quality Assurance Standards (QAS) issued by the FBI; and (3) Laboratory's forensic DNA profiles in CODIS databases were complete, accurate, and allowable for inclusion in NDIS. To accomplish the objectives of the audit, we:

 Examined internal and external Laboratory review reports and supporting documentation for corrective action taken, if any, to determine: (a) if the Laboratory complied with the QAS, (b) whether repeat findings were identified, and (c) whether recommendations were adequately resolved.<sup>24</sup>

In accordance with the QAS, the internal and external laboratory review procedures are to address, at a minimum, a laboratory's quality assurance program, organization and management, personnel qualifications, facilities, evidence control, validation of methods and procedures, analytical procedures, calibration and maintenance of instruments and equipment, proficiency testing of analysts, corrective action for discrepancies and errors, review of case files, reports, safety,

<sup>&</sup>lt;sup>24</sup> The QAS require that laboratories undergo annual audits. Every other year, the QAS requires that the audit be performed by an external agency that performs DNA identification analysis and is independent of the laboratory being reviewed. These audits are not required by the QAS to be performed in accordance with the *Government Auditing Standards* (GAS) and are not performed by the Department of Justice Office of the Inspector General. Therefore, we will refer to the QAS audits as reviews (either an internal laboratory review or an external laboratory review, as applicable) to avoid confusion with our audits that are conducted in accordance with GAS.

and previous audits. The QAS require that internal and external reviews be performed by personnel who have successfully completed the FBI's training course for conducting such reviews.

As permitted by GAS 7.42 (2007 revision), we generally relied on the results of the Laboratory's external laboratory reviews to determine if the Laboratory complied with the QAS.<sup>25</sup> In order to rely on the work of non-auditors, GAS requires that we perform procedures to obtain sufficient evidence that the work can be relied upon. Therefore, we: (1) obtained evidence concerning the qualifications and independence of the individuals who conducted the review and (2) determined that the scope, quality, and timing of the audit work performed was adequate for reliance in the context of the current audit objectives by reviewing the evaluation procedure guide and resultant findings to understand the methods and significant assumptions used by the individuals conducting the reviews. Based on this work, we determined that we could rely on the results of the Laboratory's external laboratory review.

- Interviewed Laboratory officials to identify management controls, Laboratory operational policies and procedures, Laboratory certifications or accreditations, and analytical information related to DNA profiles.
- Toured the Laboratory to observe facility security measures as well as the procedures and controls related to the receipt, processing, analyzing, and storage of forensic evidence and convicted offender DNA samples.
- Reviewed the Laboratory's written policies and procedures related to conducting internal reviews, resolving review findings, expunging DNA profiles from NDIS, and resolving matches among DNA profiles in NDIS.

We also considered the results of the Laboratory's internal review, but could not rely on it because it was not performed by personnel independent of the Laboratory. Further, as noted in Appendix II, we performed audit testing to verify Laboratory compliance with specific Quality Assurance Standards that have a substantial effect on the integrity of the DNA profiles uploaded to NDIS.

- Reviewed supporting documentation for 13 of 322 NDIS matches to determine whether they were resolved in a timely manner. The Laboratory provided the universe of NDIS matches as of July 16, 2010. The sample was judgmentally selected to include both case-to-case and case-to-offender matches. This non-statistical sample does not allow projection of the test results to all matches.
- Reviewed supporting documentation to determine whether the Laboratory provided adequate vendor oversight.
- Reviewed the case files for selected forensic DNA profiles to determine if the profiles were developed in accordance with the Forensic QAS and were complete, accurate, and allowable for inclusion in NDIS.
- The NDIS Custodian, via the contractor used by the FBI to maintain NDIS and the CODIS software, provided a printout identifying the 753 Short Tandem Repeat forensic profiles the Laboratory had uploaded to NDIS as of July 2, 2010. We limited our review to a sample of 100 profiles. This sample size was determined judgmentally because preliminary audit work determined that risk was not unacceptably high.
- Using the judgmentally determined sample size, we randomly selected a
  representative sample of labels associated with specific profiles in our
  universe to reduce the effect of any patterns in the list of profiles
  provided to us. However, since the sample size was judgmentally
  determined, the results obtained from testing this limited sample of
  profiles may not be projected to the universe of profiles from which the
  sample was selected.

The objectives of our audit concerned the Laboratory's compliance with required standards and the related internal controls. Accordingly, we did not attach a separate statement on compliance with laws and regulations or a statement on internal controls to this report. See Appendix II for detailed information on our audit criteria.

#### APPENDIX II

#### **AUDIT CRITERIA**

In conducting our audit, we considered the NDIS participation requirements and the Quality Assurance Standards (QAS). However, we did not test for compliance with elements that were not applicable to the Laboratory. In addition, we established standards to test the completeness and accuracy of DNA profiles as well as the timely notification of DNA profile matches to law enforcement.

# **NDIS Participation Requirements**

The NDIS participation requirements, which consist of the Memorandum of Understanding (MOU) and the NDIS operational procedures, establish the responsibilities and obligations of laboratories that participate in NDIS. The MOU requires that NDIS participants comply with federal legislation and the QAS, as well as NDIS-specific requirements accompanying the MOU in the form of appendices. We focused our audit on specific sections of the following NDIS operational procedures.

- DNA Data Acceptance Standards
- DNA Data Accepted at NDIS
- Quality Assurance Standards (QAS) Audits
- NDIS DNA Autosearches
- Confirm an Interstate Candidate Match
- General Responsibilities
- Initiate and Maintain a Laboratory's Participation in NDIS
- Security Requirements
- CODIS Users
- CODIS Administrator Responsibilities
- Access to, and Disclosure of, DNA Records and Samples
- Upload of DNA Records
- Expunge a DNA Record

# **Quality Assurance Standards**

The FBI issued two sets of Quality Assurance Standards (QAS): QAS for Forensic DNA Testing Laboratories, effective July 1, 2009 (Forensic QAS); and QAS for DNA Databasing Laboratories, effective July 1, 2009 (Offender QAS). The Forensic QAS and the Offender QAS describe the quality assurance requirements that the Laboratory should follow to ensure the quality and integrity of the data it produces.

For our audit, we generally relied on the reported results of the Laboratory's most recent annual external review to determine if the Laboratory was in compliance with the QAS. Additionally, we performed audit work to verify that the Laboratory was in compliance with the QAS listed below because they have a substantial effect on the integrity of the DNA profiles uploaded to NDIS.

- Facilities (Forensic QAS and Offender QAS 6.1): The laboratory shall have a facility that is designed to ensure the integrity of the analyses and the evidence.
- Evidence Control (Forensic QAS 7.1): The laboratory shall have and follow a documented evidence control system to ensure the integrity of physical evidence. Where possible, the laboratory shall retain or return a portion of the evidence sample or extract.
- Sample Control (Offender QAS 7.1): The laboratory shall have and follow a documented sample inventory control system to ensure the integrity of database and known samples.
- Analytical Procedures (Forensic QAS and Offender QAS 9.5): The laboratory shall monitor the analytical procedures using [appropriate] controls and standards.
- Review (Forensic QAS 12.1): The laboratory shall conduct administrative and technical reviews of all case files and reports to ensure conclusions and supporting data are reasonable and within the constraints of scientific knowledge.

(Offender QAS Standard 12.1): The laboratory shall have and follow written procedures for reviewing DNA records and DNA database information, including the resolution of database matches.

• [Reviews] (Forensic QAS and Offender QAS 15.1 and 15.2): The laboratory shall be audited annually in accordance with [the QAS]. The annual audits shall occur every calendar year and shall be at least 6 months and no more than 18 months apart.

At least once every two years, an external audit shall be conducted by an audit team comprised of qualified auditors from a second agency(ies) and having at least one team member who is or has been previously qualified in the laboratory's current DNA technologies and platform.

 Outsourcing (Forensic QAS and Offender QAS Standard 17.1): A vendor laboratory performing forensic and database DNA analysis shall comply with these Standards and the accreditation requirements of federal law.

Forensic QAS 17.4: An NDIS participating laboratory shall have and follow a procedure to verify the integrity of the DNA data received through the performance of the technical review of DNA data from a vendor laboratory.

Offender QAS Standard 17.4: An NDIS participating laboratory shall have, follow and document appropriate quality assurance procedures to verify the integrity of the data received from the vendor laboratory including, but not limited to, the following: Random reanalysis of database, known or casework reference samples; Inclusion of QC samples; Performance of an on-site visit by an NDIS participating laboratory or multi-laboratory system outsourcing DNA sample(s) to a vendor laboratory or accepting ownership of DNA data from a vendor laboratory.

# Office of the Inspector General Standards

We established standards to test the completeness and accuracy of DNA profiles as well as the timely notification of law enforcement when DNA profile matches occur in NDIS. Our standards are listed below.

 Completeness of DNA Profiles: A profile must include each value returned at each locus for which the analyst obtained results. Our rationale for this standard is that the probability of a false match among DNA profiles is reduced as the number of loci included in a profile increases. A false match would require the unnecessary use of laboratory resources to refute the match.

- Accuracy of DNA Profiles: The values at each locus of a profile must match those identified during analysis. Our rationale for this standard is that inaccurate profiles may: (1) preclude DNA profiles from being matched and, therefore, the potential to link convicted offenders to a crime or to link previously unrelated crimes to each other may be lost; or (2) result in a false match that would require the unnecessary use of laboratory resources to refute the match.
- Timely Notification of Law Enforcement When DNA Profile Matches Occur in NDIS: Laboratories should notify law enforcement personnel of NDIS matches within 2 weeks of the match confirmation date, unless there are extenuating circumstances. Our rationale for this standard is that untimely notification of law enforcement personnel may result in the suspected perpetrator committing additional, and possibly more egregious, crimes if the individual is not deceased or already incarcerated for the commission of other crimes.

#### APPENDIX III

# LABORATORY RESPONSE TO THE DRAFT REPORT

#### **Forensic Services Division**

October 18, 2010

Mr. Troy Meyer Regional Audit Manager Washington Regional Audit Office Office of the Inspector General U.S. Department of Justice 1300 N. 17<sup>th</sup> Street Suite 3400 Arlington, VA 22209

Dear Mr. Troy Meyer:

In response to the findings of the DOJ-OIG Inspection which occurred in August 2010 and covered the period July 2008 through August 2010, the following is the Prince George's County Police Department's responses to the recommendations by the auditors:

#### **I-Compliance with NDIS Participation Requirements**

#### Recommendations

1. Direct the Laboratory to store their on-site backup hard drive in a locked container

#### **Response:**

The Laboratory has removed the hard drive and has begun storing the drive in a locked secure location. The hard drive is now being removed and returned to the CODIS Unit only when it is time to conduct a back up.

In addition a new server has been ordered that would accommodate tape drive back up that would be more convenient for the task of backing up the CODIS Data. It is anticipated that this will be installed before the end of 2010.

2. Direct the Laboratory to implement a policy for confirming matches within the 30 day period as well as notifying investigators in the allotted two weeks after confirmation.

#### **Response:**

A new policy was implemented in the CODIS Procedure Manual to ensure that all matches will be confirmed with- in 30 days. This means that the Prince Georges County DNA Laboratory will make contact with the corresponding laboratory so that the corresponding laboratory can initiate the confirmation process in a timely manner, further once confirmation has been completed by the corresponding laboratory the Prince George's County Laboratory will ensure that the investigator is notified within two weeks. (See Attached)

The Department has recently transferred an officer to the CODIS Unit to assist in ensuring that the laboratory remains compliant with the recommendation of notifying investigators in the allotted two weeks as well as assisting in the acquisition of information pertaining to casework.

#### **II-Compliance with the Quality Assurance Standards**

3. Direct that the lab to insert a written policy in its QAM regarding the locking of all freezers containing DNA extracts, which reads: All freezers containing DNA extracts will be locked at tall times"

#### **Response:**

This recommendation was resolved once it was brought to the laboratory's attention. The statement "All freezers containing DNA extracts will be locked at all times" was added to the protocol. (See Attached)

#### **III-Appropriateness of Forensic DNA Profiles in CODIS Databases**

Recommendations

4. Direct that the Laboratory to document the profile suitability review for all future profiles that are uploaded into NDIS.

#### **Response:**

A new form was recently implemented that addressed this recommendation. The form will document the reasons while the profile is suitable for each profile being uploaded to the State of Maryland and subsequently NDIS. (See Attached)

5. Direct that the Laboratory implement a policy in its QAM that requires analysts to document the review of the profile suitability documentation during its match resolution process.

#### **Response:**

A new procedure has been implemented in the CODIS Procedure Manual that requires all analysts to document the review of the profile suitability during the match resolution process. This would include but is not limited to the a-continuation reports, b-case communications, e-mails from the investigating officers. (See Attached)

6. Direct that the Laboratory create and implement a policy or procedure for a contingency plan used in future cases of faulty equipment; specifically, the Macintosh computer necessary to run Genescans.

# **Response:**

The Laboratory has been in contact with Applied Bio-system, the software manufacturer. They have agreed to provide the DNA Laboratory with conversion software that would convert the data to a format that can be read.

Should you have any questions or require additional information concerning this response, please contact Ms. Lynnett Redhead, Manager/CODIS Administrator, DNA Laboratory, at (301)-772-4837.

Sincerely,

Milburne Lynn Commander Forensic Services Division Prince George's County Police Department

#### Enclosure

Cc: Douglas R. Hares, PhD
NDIS Custodian
CODIS Unit
Laboratory Division

#### APPENDIX IV

# THE FEDERAL BUREAU OF INVESTIGATION RESPONSE TO THE DRAFT REPORT

U.S. Department of Justice



Federal Bureau of Investigation

Washington, D. C. 20535-0001

October 22, 2010

Troy M. Meyer Regional Audit Manager Washington Regional Audit Office Office of the Inspector General 1300 North 17th Street Suite 3400 Arlington, VA 22209

Dear Mr. Meyer:

Your memorandum to Director Mueller forwarding the draft audit report for the Prince George's County Police Department Laboratory, Landover, Maryland (Laboratory), has been referred to me for response.

Your draft audit report contained six recommendations relating to the Laboratory's compliance with the FBI's Memorandum of Understanding and *Quality Assurance Standards for Forensic DNA Testing Laboratories*. The CODIS Unit is in contact with the Laboratory and continues to work with its staff on closure of the recommendations.

Thank you for sharing the draft audit report with us. If you have any questions, please feel free to contact Jennifer Luttman, Chief of the CODIS Unit, at (703) 632-8315.

Sincerely,

Alice R. Isenberg, Ph.D Section Chief Biometrics Analysis Section FBI Laboratory

#### APPENDIX V

# OFFICE OF INSPECTOR GENERAL ANALYSIS AND SUMMARY OF ACTIONS NECESSARY TO CLOSE THE REPORT

The Office of the Inspector General (OIG) provided the draft to the Prince George's County Police Department Crime Laboratory (Laboratory) and the Federal Bureau of Investigation (FBI). The Laboratory's response is presented in Appendix III, and the FBI's response is presented in Appendix IV.

In its response to the draft report, the Laboratory addressed each of the six recommendations that were made in the report. Furthermore, where appropriate, the Laboratory provided documentation for newly implemented forms, as well as changes to its Quality Assurance Manual and CODIS Procedure Manual.

#### **Status of Recommendations**

- 1. **Closed.** The Laboratory started removing the back-up hard drive and storing it in a locked, secure location; returning it to the CODIS Unit only when the back-up was occurring. Furthermore, the Laboratory stated that a new server, capable of a more convenient tape drive back-up system, was ordered and would be installed before the end of 2010.
- 2. Closed. The Laboratory implemented a new policy in its CODIS Procedure Manual to ensure that a good faith effort was made to confirm all matches within 30 days, and to notify investigators within two weeks of confirmation. Additionally, the Laboratory stated that an officer was transferred to the CODIS Unit to assist in notifying investigators within two weeks of confirmation, as well as acquiring information pertaining to casework.
- 3. **Closed.** The Laboratory added the statement "All freezers containing DNA extracts will be locked at all time," to its Quality Assurance Manual.

- 4. Closed. The Laboratory implemented a new review form that documents the reasons the profile is suitable for upload into the SDIS, as well as NDIS. A corresponding procedure in the CODIS Procedure Manual states that the CODIS Administrator or designee must review each case folder and profile to be uploaded to ensure eligibility. Furthermore, it requires the SDIS Review Form be completed and signed.
- 5. **Closed.** The Laboratory implemented a new procedure in its CODIS Procedure Manual that requires all analysts to document that they have reviewed and provided documentation to substantiate the profile suitability for entry into CODIS during the match resolution process.
- 6. **Closed.** The Laboratory has been in contact with Applied Biosystems, a software manufacturer, that agreed to convert the GeneScan<sup>®</sup> data to a format that can be read.