Audit of Compliance with Standards Governing Combined DNA Index System Activities at the Honolulu Police Department Scientific Investigation Section Forensic Laboratory Honolulu, Hawaii
The U.S. 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 Honolulu Police Department Scientific Investigation Section Forensic 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 identifying missing or unidentified persons. 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 enables 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. The National DNA Index System (NDIS), the highest level in the hierarchy, contains DNA profiles uploaded by law enforcement agencies across the United States and is managed by the FBI. 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 and contains DNA profiles from local laboratories and state offenders. The Local DNA Index System (LDIS) is used by local laboratories.

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 June 2012 through July 2014. The objectives of our audit were to determine if: (1) the Laboratory was in compliance with select NDIS Operational Procedures; (2) the Laboratory was in compliance with certain 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.2

Our review determined the following:

- The Laboratory was in compliance with the NDIS participation requirements regarding updated NDIS eligibility training for its personnel, physical security over its CODIS server, and CODIS back-up procedures. However, we found that the Laboratory did not resolve all matches, notify investigators in a timely manner, and did not maintain adequate documentation in its case files regarding its notifications to investigators of matches. We also found that the Laboratory’s CODIS terminal was not adequately secured against unauthorized personnel gaining access.

- The Laboratory was in compliance with the QAS we reviewed, including: (1) completion of periodic internal and external QAS reviews; (2) implementation of corrective actions presented by internal and external reviews; and (3) policies regarding amplified DNA being generated, processed, and stored in a room separate from evidence examination, DNA extraction, and polymerase chain reaction (PCR) setup areas. We observed that the Laboratory did not fully meet QAS standards because it did not adequately safeguard access to the Laboratory and evidence storage area.

- We reviewed 100 of the Laboratory’s 796 forensic profiles that had been uploaded to NDIS as of July 10, 2014. Of the 100 forensic profiles sampled, we found that 97 profiles were complete, accurate, and allowable. We identified two unallowable profiles that were not attributable to a putative perpetrator and one inaccurate profile that had part of the victim’s DNA profile uploaded to NDIS. The Laboratory agreed to delete the two unallowable profiles and corrected the third inaccurate profile by removing the portion of DNA attributable to the victim. In addition, we found the Laboratory had uploaded to NDIS seven forensic profiles prior to being technically reviewed. We also found 42 forensic profiles that were uploaded to NDIS prior to receiving a secondary review for CODIS eligibility as required by the FBI.

We made six recommendations to address the Laboratory’s compliance with standards governing CODIS activities, which are discussed in detail in the Findings

2 Our review of the Laboratory’s forensic profiles in NDIS covered the period from 2009 through 2014.
and Recommendations section of the report. Our audit objectives, scope, and methodology are detailed in Appendix 1 of the report and the audit criteria are detailed in Appendix 2.

We discussed the results of our audit with Laboratory officials and have included their comments in the report as applicable. In addition, we requested from the Laboratory and the FBI written responses to a draft copy of our audit report. We received those responses and they are found in Appendices 3 and 4, respectively. Our analysis of those responses and the status of the recommendations are found in Appendix 5.
## AUDIT OF COMPLIANCE WITH STANDARDS GOVERNING COMBINED DNA INDEX SYSTEM ACTIVITIES AT THE HONOLULU POLICE DEPARTMENT SCIENTIFIC INVESTIGATION SECTION FORENSIC LABORATORY HONOLULU, HAWAII

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INTRODUCTION

The U.S. 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 Honolulu Police Department Scientific Investigation Section Forensic 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. 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 covered the period from June 2012 to July 2014. The objectives of our audit were to determine if: (1) the Laboratory was in compliance with select National DNA Index System (NDIS) Operational Procedures; (2) the Laboratory was in compliance with certain 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 discussed the results of our audit with Laboratory officials and have included their comments in the report as applicable. In addition, we requested from the Laboratory and the FBI written responses to a draft copy of our audit report. We received those responses and they are found in Appendices 3

3 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.

4 Our review of the Laboratory’s forensic profiles in CODIS covered the period from 2009 through 2014.
and 4, respectively. Our analysis of those responses and the status of the recommendations are found in Appendix 5.

**Legal Foundation for CODIS**

The FBI’s CODIS program began 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.5

**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.

**CODIS Structure**

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, managed by the FBI as the nation’s DNA database containing DNA profiles uploaded by participating states; (2) the State DNA Index System (SDIS), which serves as a state’s DNA database containing DNA profiles from local laboratories within the state and state offenders; and (3) the Local DNA Index

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System (LDIS), 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 Florida Department of Law Enforcement Orlando, Florida, sends its profiles to the state laboratory in Tallahassee, Florida, 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 illustrates how the system hierarchy works.

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**National DNA Index System**

NDIS, the highest level in the CODIS hierarchy, enables 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.

- **Convicted Offender Index** contains profiles generated from persons convicted of qualifying offenses.6

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6 The phrase “qualifying offenses” refers to state or federal crimes that require a person to provide a DNA sample in accordance with applicable laws.
• **Arrestee Index** is comprised of profiles developed from persons who have been arrested, indicted, or charged in an information with a crime.

• **Legal Index** consists of profiles that are produced from DNA samples collected from persons under other applicable legal authorities.\(^7\)

• **Detainee Index** contains profiles from non-U.S. persons detained under the authority of the United States and required by law to provide a DNA sample for analysis and entry into NDIS.

• **Forensic Index** profiles originate from a single source Forensic Sample (biological sample found at the scene of a crime) attributable to the putative perpetrator.

• **Forensic Mixture Index** profiles originate from forensic samples that contain DNA contributed from more than one source attributable to a putative perpetrator(s).

• **Forensic Partial Index** profiles that originate from a single source (or a fully deduced profile originating from a mixture) Forensic Sample attributable to the putative perpetrator with either locus or allelic dropout at any of the 13 core CODIS loci.

• **Missing Person Index** contains known DNA records of missing persons and deduced missing persons.

• **Unidentified Human (Remains) Index** holds profiles from unidentified living individuals and the remains of unidentified deceased individuals.\(^8\)

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

Given these multiple databases, the main functions of CODIS 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.

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\(^{7}\) An example of a Legal Index profile would be one from a person found not guilty by reason of insanity who is required by the relevant state law to provide a DNA sample.

\(^{8}\) 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.
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. For instance, those persons may be identified through matches between the profiles in the Missing Person Index and the Unidentified Human (Remains) Index. In addition, the profiles within the Missing Person and Unidentified Human (Remains) Indices may be searched against the Forensic, Convicted Offender, Arrestee, Detainee, and Legal Indices to provide investigators with leads in solving missing and unidentified person cases.

State and Local DNA Index Systems

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.

CODIS becomes more useful as the quantity of DNA profiles in the system increases because the potential for additional leads rises. However, the utility of CODIS relies upon the completeness, accuracy, and quality 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, may generate false positive leads, false negative comparisons, or lead to the identification of an incorrect sample. Further, 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 Operational Procedures and the profiles uploaded to CODIS are complete, accurate, and allowable for inclusion in NDIS.

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9 A “locus” is a specific location of a gene on a chromosome. The plural form of locus is loci.
Laboratory Information

According to Laboratory officials, the Laboratory serves 12 agencies including the U.S. Army, U.S. Navy, and the Bureau of Alcohol, Tobacco, Firearms and Explosives. In total, the Laboratory serves a population size of approximately 1.4 million people from 4 counties (Honolulu, Kauai, Maui, and Hawaii). The Laboratory participates in the CODIS program as a SDIS Laboratory and maintains both a forensic and convicted offender database. In 1995, the Laboratory began analyzing DNA for its criminal cases using Short Tandem Repeat (STR), and in 2003, it began uploading forensic and convicted offender profiles to CODIS.

The Laboratory was last accredited for 4 years by the ANSI-ASQ National Accreditation Board/Forensic Quality Services (FQS) in May 2012. Thus, the Laboratory is up for renewal in May 2016.

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10 FQS is a member of the ANSI-ASQ National Accreditation Board and provides accreditation for the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17025 forensic laboratories and ISO/IEC 17020 forensic inspection agencies. FQS is recognized by the FBI to perform QAS DNA assessment.
FINDINGS AND RECOMMENDATIONS

I. Compliance with NDIS Operational Procedures

The Laboratory was in compliance with the NDIS participation requirements regarding updated NDIS eligibility training for its personnel, physical security over its CODIS server, and CODIS back-up procedures. However, we found that the Laboratory did not resolve all matches, notify investigators in a timely manner, and did not maintain adequate documentation in its case files regarding its notifications to investigators of matches. We also found that the Laboratory’s CODIS terminal was not adequately secured against unauthorized personnel gaining access to the equipment.

The NDIS Operational Procedures Manual, which includes the NDIS Laboratories Participation Requirements, establishes the responsibilities and obligations of laboratories that participate in the CODIS program at the national level. The NDIS Operational Procedures provide detailed instructions for laboratories to follow when performing certain procedures pertinent to NDIS. The NDIS operational procedures we reviewed are listed in Appendix II of this report.

Results of the OIG Audit

We found several instances in which the Laboratory did not comply with the NDIS participation requirements we reviewed. Specifically, we noted three instances in which the Laboratory did not resolve matches in a timely manner, one instance in which the Laboratory did not notify investigators in a timely manner, and one instance where the Laboratory did not know if an investigator had been notified of a match. We also found that the CODIS terminal was not secured against unauthorized personnel gaining access to the equipment. The results of our audit are described in more detail below.

Match Resolution

The NDIS Operational Procedures describe what participating laboratories must do to confirm matches that are identified in the CODIS system. Additionally, the NDIS Operational Procedures require that the offender laboratory contacted for match follow-up make a good faith effort to review its DNA data and respond to the requesting laboratory within 30 business days of receipt of the request. The casework laboratory must inform the submitting law enforcement agency or authorized criminal justice agency of the confirmed match.

We selected a judgmental sample of nine NDIS matches and reviewed available documentation to determine if the Laboratory confirmed the matches in a timely manner. We determined that the Laboratory confirmed five of the nine
matches in a timely manner and one match was confirmed in 67 business days due to delays caused by another laboratory.

For the remaining three matches, confirmation of the match did not take place within 30 business days of receipt of the request. The Laboratory took 59 business days to request confirmation after being notified of an offender match to one of its forensic profiles, for a total of 66 business days to resolve the match. For another offender match to a laboratory forensic profile, the Laboratory requested confirmation 72 days after being notified, for a total of 105 business days to resolve the match. Finally, the last match took 45 business days to resolve because the Laboratory took 40 business days to respond because the Laboratory took 40 business days to respond to another laboratory’s request for confirmation. The CODIS Administrator stated the Laboratory attempts to resolve all matches within 30 business days, but did not provide additional information for why the Laboratory was untimely in resolving these three matches.

For the nine matches we reviewed, the Laboratory was also required to notify the investigator of the match in four instances. We determined that for two of the matches the Laboratory notified the investigator within two weeks. For the third match, the investigator was notified 20 business days after the match was confirmed. For the final match, based on the documentation that was available in the case file the Laboratory was unable to determine if or when the investigator had been notified. When we brought this to the Laboratory’s attention, the Laboratory provided a report intended to notify the investigator of the match, but the Laboratory could not confirm whether the report was provided to the investigator.

The Laboratory’s match policy stated, in accordance with the NDIS Operational Procedures, that the offender laboratory contacted for match follow-up make a good faith effort to review its DNA data and respond to the requesting laboratory within 30 business days of the request. However, the Laboratory’s match policy does not require investigators to be notified of a match in a timely manner or to maintain documentation of that notification. Without timely notification of the match, an investigator cannot follow-up on investigative leads, possibly preventing additional crime.

We believe that the Laboratory should consider specifying in its policy the type of documentation that it should retain in case files regarding key actions that are taken in order to ensure that law enforcement receives timely notification. Therefore, we recommend the Laboratory abide by its NDIS match policy and maintain documentation of its good faith effort of timely match resolutions. In addition, we recommend the Laboratory maintain adequate documentation of timely notification to law enforcement agencies for all confirmed matches.

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11 Four of the nine matches we reviewed for the Laboratory were forensic matches that required investigator notification. The remaining five matches we reviewed were offender matches that did not require investigator notification.
Physical Security of the CODIS Terminal

The NDIS Security Requirements state that the CODIS terminal shall be physically safeguarded from unauthorized use and be only accessible to a limited number of approved personnel. We found that the CODIS terminal was located in a cubicle in the general office area of the Scientific Investigation Section (SIS), located in the Honolulu Police Department (HPD) headquarters building. Everyone with access to the SIS, which consisted of at least 47 employees at the time of our site visit, had physical access to the CODIS terminal. Only 7 of these 47 employees were CODIS users with a need to access the CODIS terminal. In addition, during our fieldwork we noted on two occasions that the main doors to the SIS were propped open. Anyone having access into the HPD headquarters building, including visitors, could also have access to the floor where the SIS is located, as well as the SIS general office area and terminal if the SIS’s main doors are propped open.

The CODIS Administrator explained that a receptionist sits at the main entrance doors to the SIS and prevents unauthorized access into the SIS. However, during our fieldwork we also noted that the receptionist was not always present and unauthorized physical access to the SIS and thereby the CODIS terminal could occur. The CODIS Administrator noted that only CODIS users with a password could electronically access the CODIS terminal. Nevertheless, the CODIS Administrator stated that the CODIS terminal would be relocated into the CODIS server room that is locked and secure at all times and access is limited to CODIS users and Laboratory Supervisors. Therefore, we recommend the FBI ensure the Laboratory adequately safeguards the CODIS terminal and limits access to only approved personnel.

We did not identify significant deficiencies with the Laboratory’s compliance with other NDIS operational procedures we reviewed, as described below.

- The NDIS Operational Procedures manual in effect during our audit required that participating laboratories ensure that CODIS users are provided copies of, understand and abide by the Memorandum of Understanding for Participation in NDIS, the NDIS operational procedures, and supporting documentation issued by the FBI. The Laboratory’s CODIS Administrator stated that the MOU for Participation in NDIS, the NDIS operational procedures, and the FBI’s eligibility flowchart are available for all via the FBI’s Criminal Justice Information System—Wide Area Network (CJIS-WAN). All Laboratory forensic personnel have access to these documents on the CJIS-WAN. Finally, we interviewed four of the seven CODIS users who stated that they were aware of the NDIS procedures and that they knew how to access the procedures on the CJIS-WAN. One CODIS user could not access the procedures on the CJIS-WAN because he forgot his password, but asked the CODIS Administrator to reset his password in order to log in and access them, which we consider to be complaint with the NDIS procedures.
• The Laboratory’s CODIS users are required to complete annual DNA records acceptance training. The FBI provided a list of Laboratory personnel who had received this mandatory annual training, which we compared to a similar list of personnel provided by the Laboratory. We found that all authorized personnel required to complete the training had successfully completed the annual training in 2014.

• The FBI requires that a participating laboratory submit fingerprint cards, background information, CODIS user information, and other appropriate documentation to the FBI for each CODIS user. We verified that all necessary documents were provided to the FBI for all seven CODIS users.

• The NDIS Security Requirements state that the CODIS server shall be physically safeguarded from unauthorized use and be only accessible to a limited number of approved personnel. We found that only authorized Laboratory personnel had access to the server room where the CODIS server was located. Moreover, the Laboratory’s in-house policy limits access to the CODIS database to only CODIS users, which have their own CODIS accounts, unique passwords, and must undergo annual CODIS training. We confirmed that only CODIS users within the Laboratory had access to CODIS with one exception. We found that a CODIS Analyst user account that was no longer being used was still active in CODIS. According to laboratory personnel, the CODIS Analyst user account was utilized only during the Laboratory’s initial CODIS program set-up and the account was never deactivated. After we brought this to the Laboratory’s attention, the CODIS Administrator deactivated the CODIS Analyst user account and provided us a report with the CODIS Analyst user account stop date. Based on this evidence and the Laboratory’s corrective actions, we do not consider this to be a finding regarding the Laboratory’s effort to adhere to the NDIS Security Requirements.

• The Laboratory’s in-house policy requires that a backup of CODIS data be performed at least once per week. Further, according to Laboratory policy, once a month the CODIS backup media is placed in a locked fireproof box and taken to an off-site location at the Human Resources Division for storage. The DNA Technical Lead and two Supervisors have access to the backup media. We confirmed that back-up software was installed on the CODIS terminal and we physically verified the existence of the Laboratory’s external hard drive, confirming that the Laboratory was following its in-house back-up policy.

**Conclusion**

We found that the Laboratory was in compliance with the NDIS participation requirements we reviewed, with several exceptions. The Laboratory failed to follow its NDIS match policy and did not resolve all matches in a timely manner. Also, the Laboratory had no requirement to notify law enforcement of matches or to maintain documentation in the case files to support notification of law enforcement in a
timely manner. Finally, the Laboratory’s CODIS terminal was not adequately secured against unauthorized personnel gaining access to the equipment.

**Recommendations**

We recommend that the FBI:

1. Ensure the Laboratory maintains documentation of its good faith effort for timely resolution of matches.

2. Ensure the Laboratory maintains appropriate documentation of timely notification to law enforcement agencies of all confirmed matches.

3. Ensure the Laboratory adequately safeguards the CODIS terminal and limits access to only approved personnel.
II. Compliance with Quality Assurance Standards

The Laboratory was in compliance with the QAS we reviewed, including: (1) completion of periodic internal and external QAS reviews; (2) implementation of corrective actions presented by internal and external reviews; and (3) policies regarding amplified DNA being generated, processed, and stored in a room separate from evidence examination, DNA extraction, and PCR setup areas. We observed that the Laboratory did not fully meet QAS standards that outline controlled access to the Laboratory and evidence storage area.

During our audit, we considered the Forensic and Offender QAS issued by the FBI.12 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.13 The QAS we reviewed are listed in Appendix II.

Results of the OIG Audit

We found that security at the Laboratory did not fully meet QAS standards that outline controlled access to the Laboratory and evidence storage area. Specifically, we found during our fieldwork instances where the doors to the SIS were propped open, which could allow unauthorized personnel to gain access to the SIS. In addition, we also observed a propped open evidence storage room door within the Laboratory. The results of our audit are described in more detail below.

**Controlled and Limited Access to the Laboratory and Evidence Storage Areas**

During our tour of the Laboratory, we reviewed the security measures in place for limited entry into the SIS of the HPD that houses the Laboratory. We determined that the HPD does have measures in place to secure access to the building from the outside through key locks and a security guard stationed at the main public entrance to the HPD. Security cameras are also stationed around the perimeter of the building and all non-HPD personnel must go through a metal

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13 The QAS require that laboratories undergo annual audits. Every other year, the QAS requires that the audit be performed by an audit team of qualified auditor(s), from an external agency. 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.
detector prior to entering the building. On two separate occasions during our fieldwork, the doors leading into the SIS was propped open. This is of concern because any HPD personnel not associated with the SIS or even visitors to the HPD could gain unauthorized access to the SIS. In addition, as previously mentioned in this report, the CODIS terminal was located in the main cubicle area of the SIS at the time of our fieldwork. The CODIS Administrator informed us that a receptionist was stationed at the main entrance doors to the SIS to prevent unauthorized access to the SIS. However, we noted instances in which the receptionist was not always at her desk and unauthorized access to the SIS could have occurred. Keeping the main doors to the SIS closed and secure at all times would prevent unauthorized access to the facility. We observed that the doors to the Laboratory, located within the SIS space, were closed at the time of our visit and were secured by a key system known as Intellikey, which limited access to only authorized personnel.

The HPD is responsible for the storage of the majority of crime scene evidence that is brought to the Laboratory for analysis. We observed that the HPD Evidence Depository was secure and access to it was limited to authorized personnel only, which included Evidence Custodians, a Senior Typist, a Police Major, Police Sergeants, and a Police Lieutenant. The chain of custody over evidence was documented on the HPD’s Property Report. For example, a DNA Analyst submits a work request to the HPD Evidence Custodian to sign-out evidence for analysis. The transfer of the evidence is recorded on the Property Report which contains the unique identification number of the evidence, and the names and signatures of each person that accepts and releases possession of the evidence.

Once evidence is signed out of HPD Evidence Depository by DNA Analysts for analysis, they maintain the evidence in the Laboratory’s evidence storage room temporarily when it is not in the DNA Analyst’s immediate custody. According to the Laboratory’s Quality Manual all evidence stored in the Laboratory’s evidence storage rooms needs to be stored in a secure manner to prevent tampering and contamination. However, during our tour of the Laboratory, we observed that the evidence storage room door was propped open. In the evidence storage room, we observed evidence was stored on open shelves and in an unlocked refrigerator. We believe evidence in storage should be kept secure, even though that storage may be in a locked and secured laboratory space. Therefore, we recommend the FBI ensure the Laboratory secures the doors to the SIS and the forensic evidence storage room within the Laboratory at all times. We also observed a separate walk-in freezer storage area for convicted offender samples that was secure and access to it was limited to authorized personnel only.

Upon completion of DNA analysis, the DNA Analyst returns the evidence to the HPD Evidence Depository, where it is signed back in by the Evidence Custodian and the transfer of custody is recorded on the Property Report. According to the HPD’s policy, the lead investigator has the final authority regarding the disposition of the evidence. The SIS returns DNA evidence submitted from outside counties to the submitting law enforcement agency and maintains convicted offender samples indefinitely.
We found that the Laboratory complied with the other QAS we reviewed, as described below.

- The QAS requires laboratories to undergo an annual review, including an external review every 2 years. During our fieldwork in July 2014, we found that the Laboratory had an external QAS review performed in May 2014 and an internal QAS review performed in October 2013, in accordance with the FBI’s requirement.

- We reviewed the Laboratory’s most recent QAS review reports. Both the external and internal reviews were conducted using the FBI’s QAS Review Document. The FBI confirmed that at least one of the QAS reviewers for both reviews had successfully completed the FBI QAS review training course.
  
  o The external QAS review conducted in May 2014 noted one finding for the Laboratory. We confirmed that the Laboratory implemented a corrective action for the finding.
  
  o The internal QAS review conducted in October 2013 noted two findings for the Laboratory. We confirmed that the Laboratory implemented a corrective action for both of the findings.

- The QAS requires that an external quality assurance review be forwarded to the FBI within 30 days of the participating laboratory’s receipt of the report. We reviewed the submission of the most recent external review and found that the report was submitted to the FBI’s NDIS Custodian in 30 days.

- We also verified that each of the QAS reviewers who conducted the most recent external QAS review completed the Auditor Self-Certification worksheet and indicated that there were no impairments to their independence.

- The QAS requires amplified DNA to be generated, processed, and stored in a room separate from evidence examination, DNA extraction, and PCR setup areas. We observed that the Laboratory had separate areas for DNA examination and extraction, PCR setup, and DNA amplification. The Laboratory is physically separated into pre-PCR and post-PCR areas and we observed the doors between the rooms remain closed. The Laboratory’s policy was to keep the doors between the rooms closed at all times except for passage. Based on our observations and review of the Laboratory’s procedures, the Laboratory was in compliance with the QAS requirement that we tested.

**Conclusion**

We found that security at the Laboratory did not fully meet QAS standards that outline controlled access to the Laboratory and evidence storage area. Specifically, we found during our fieldwork instances of propped open doors which
could allow for unauthorized personnel gaining access to the SIS. In addition, we also observed a propped open evidence storage room door within the Laboratory.

Recommendation

We recommend that the FBI:

4. Ensure the Laboratory secures the doors to the SIS and the forensic evidence storage room within the Laboratory at all times.
III. Suitability of Forensic DNA Profiles in CODIS Databases

We reviewed 100 of the 796 forensic profiles that the Laboratory uploaded to NDIS as of July 10, 2014. Of the 100 forensic profiles sampled, we found that 97 profiles were complete, accurate, and allowable. We identified two unallowable profiles that were not attributable to a putative perpetrator and one inaccurate profile that had part of the victim’s DNA profile uploaded to NDIS. The Laboratory agreed to delete the two unallowable profiles and correct the inaccurate profile by removing the portion of DNA attributable to the victim. Additionally, we found that the Laboratory had uploaded seven forensic profiles to NDIS before the profiles were technically reviewed for verification of CODIS eligibility, correct DNA types, and appropriate specimen category. We also found 42 forensic profiles that were uploaded to NDIS prior to receiving a secondary review for CODIS eligibility as required by the FBI.

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. To test the completeness and accuracy of each profile, we established standards that require a profile to include all the loci for which the analyst obtained results, and that the values at each locus match those identified during analysis. Our standards are described in more detail in Appendix II of this report.

The FBI’s NDIS Operational Procedures Manual establishes the DNA data acceptance standards by which laboratories must abide. The FBI also developed a flowchart as guidance for the laboratories for determining what is allowable in the forensic index at NDIS. Laboratories are prohibited from uploading forensic profiles to NDIS that clearly match the DNA profile of the victim or another known person that is not a suspect. A profile at NDIS that matches a suspect may be allowable if the contributor is unknown at the time of collection, however, NDIS guidelines prohibit profiles that match a suspect if that profile could reasonably have been expected to be on an item at the crime scene or part of the crime scene independent of the crime. For instance, a profile from an item seized from the suspect’s person, such as a shirt, or that was in the possession of the suspect when collected is generally not a forensic unknown and would not be allowable for upload to NDIS. The NDIS procedures we reviewed are listed in Appendix II of this report.

Results of the OIG Audit

We selected a sample of 100 profiles out of the 796 forensic profiles the Laboratory had uploaded to NDIS as of July 10, 2014. Of the 100 forensic profiles

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14 We judgmentally selected 100 forensic profiles that the Laboratory uploaded to NDIS between 2009 and 2014.
sampled, we found that 2 profiles were unallowable for NDIS and 1 profile was inaccurate. In addition, we found that the Laboratory had uploaded to NDIS 7 forensic profiles prior to being technically reviewed and 42 forensic profiles prior to receiving a secondary review for CODIS eligibility, as required by the FBI.

**Sample Number H-35**

Sample H-35 was taken from a swab from the victim’s body after a sexual assault had occurred. We deemed this profile to be inaccurate because a portion of the victim’s DNA was included in the DNA profile uploaded to NDIS. After we brought this to the CODIS Administrator’s attention the portion of the profile that was attributable to the victim was removed and the accurate DNA profile was uploaded to NDIS.

**Sample Number H-43**

Sample H-43 was taken from a flashlight found at the beach after a residential burglary had occurred. We deemed this profile to be unallowable for NDIS because there was no evidence in the case file linking the item to the crime. The sample was not retrieved from the crime scene, and there was no evidence in the case file indicating that it was attributable to a putative perpetrator. We presented this to the CODIS Administrator, who agreed that this profile was unallowable and subsequently removed it from NDIS.

**Sample Number H-68**

Sample H-68 was taken from a cigarette butt collected from a stairway leading to a kitchen door from the carport of a residence. The homeowner had left his home unattended for approximately three months. Upon his return, the homeowner noticed the kitchen door frame was broken and the house had been burglarized. At that time, the homeowner reported the break-in to the police and the cigarette butt was collected for DNA analysis. We deemed this profile to be unallowable for NDIS because there was no evidence in the case file linking the item to the crime. In addition, the home was left unattended for more than three months, and there was no evidence in the case file indicating that it was attributable to a putative perpetrator. We presented this to the CODIS Administrator, who agreed that this profile was unallowable and subsequently removed it from NDIS.

**CODIS Eligibility and Technical Review Prior to NDIS Upload**

According to the FBI’s QAS for Forensic DNA Testing Laboratories, all cases are required to be technically reviewed by a qualified DNA analyst for clerical and technical accuracy and the completion of the technical review must be documented. In addition, prior to uploading or searching a DNA profile in CODIS, the technical reviewer must verify the following criteria: (1) the DNA profile is eligible for CODIS upload; (2) the correct DNA type has been entered; and (3) the appropriate specimen category has been selected.
We found the Laboratory documented its technical review of DNA profiles on a form called the Technical Review Checklist (TRC). The Laboratory’s policy states, completion of the TRC with the reviewer’s signature indicates the review was completed. We found the Laboratory had uploaded to NDIS seven forensic profiles prior to the TRC being signed; indicating the technical review was not yet complete. The CODIS Administrator informed us that all technical reviews are completed prior to a DNA profile being uploaded to NDIS. However, based on the Laboratory’s policy the reviewer must complete the TRC and sign the form prior to NDIS upload. Therefore, we recommend the Laboratory ensure all DNA profiles are being technically reviewed prior to upload into CODIS.

The Laboratory’s TRC contains two signature lines for the technical reviewer to complete. At the first signature line, the technical reviewer attest to having reviewed for accurate case notes, test results, and eligibility criteria for the DNA profile to be allowable for upload to CODIS. At the second signature line, the technical reviewer attests to reviewing the corresponding report for accuracy. In 2010, the Laboratory updated its TRC and moved the CODIS eligibility criteria review down on the form, with the second signature attesting that the review had been complete. During our review of 100 forensic profiles, we found that 42 profiles were uploaded to NDIS prior to the Laboratory documenting the secondary review for CODIS eligibility as required by the FBI’s QAS. The CODIS Administrator explained the profiles were reviewed for CODIS eligibility prior to CODIS upload but because the CODIS eligibility section of the TRC had been moved the checklist did not reflect an accurate date of when that review had occurred. During our fieldwork, the CODIS Administrator updated the TRC and provided a draft TRC checklist on which the location of the CODIS eligibility review section had been moved up on the form to ensure the review was taking place and being documented prior to upload into CODIS. We recommend the Laboratory ensure all future DNA profiles uploaded to NDIS undergo a secondary review for CODIS eligibility prior to upload and that documentation of the review is maintained accurately.

Conclusion

Based on our testing of 100 sample forensic profiles that the Laboratory had uploaded to NDIS, we determined that 97 profiles were complete, accurate, and allowable for inclusion in NDIS, but we questioned the Laboratory’s upload of 3 forensic profiles that did not meet the standards for NDIS. The Laboratory agreed and removed the two unallowable profiles and corrected the one inaccurate uploaded profile. Because the Laboratory took corrective action on these three profiles, we make no recommendations. However, we also found that the Laboratory had uploaded to NDIS 7 forensic profiles prior to technical review and 42 forensic profiles prior to secondary review for CODIS eligibility as required by the FBI.
Recommendations

We recommend that the FBI:

5. Ensure that the Laboratory technically reviews all DNA profiles prior to upload into NDIS.

6. Ensure that the Laboratory performs a secondary review for CODIS eligibility prior to upload as required by the QAS, and that documentation of the review is maintained.
APPENDIX 1

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 June 2012 through July 2014. The objectives of the audit were to determine if the: (1) Laboratory was in compliance with select National DNA Index System (NDIS) Operational Procedures; (2) Laboratory was in compliance with certain 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.\(^{13}\)

To accomplish the objectives of the audit, we:

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

  In accordance with the QAS, a laboratory shall establish, follow, and maintain a documented quality system with procedures that address, at a minimum, a laboratory’s quality assurance program, organization and management, personnel, facilities, evidence and sample control validation, analytical procedures, calibration and maintenance of equipment, proficiency testing, corrective action, review, Documentation and reports, safety, audits, and outsourcing. 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. We obtained evidence concerning: (1) the qualifications of the internal and external reviewers, and (2) the independence of the external reviewers.

- 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.

\(^{15}\) Our review of the Laboratory’s forensic DNA profiles in NDIS covered the period from 2009 through 2014.
• 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.

• Reviewed supporting documentation for 9 of 55 NDIS matches to determine whether they were resolved in a timely manner. The Laboratory provided the universe of NDIS matches as of July 2014. The sample was judgmentally selected and included case-to-offender matches. This non-statistical sample does not allow projection of the test results to all matches.

• 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.

We obtained an electronic file identifying the specimen identification numbers of 796 searchable forensic profiles the Laboratory had uploaded to NDIS as of July 10, 2014. 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, 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 2 for detailed information on our audit criteria.
APPENDIX 2

AUDIT CRITERIA

In conducting our audit, we considered the NDIS Operational Procedures, QAS, and guidance issued by the FBI regarding forensic profile allowability in NDIS.\(^{14}\) 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 Operational Procedures**

The NDIS Operational Procedures, which include the NDIS Participation Requirements, establish the responsibilities of the FBI and the NDIS participating laboratories. We focused our audit on specific sections of the following NDIS requirements:

- NDIS Laboratories Procedures
- Quality Assurance Standards Audit Procedure
- NDIS Confirmation and Hit Dispositioning Procedure
- NDIS DNA Records Procedure
- DNA Data Acceptance Standards
- NDIS Searches Procedure
- NDIS Security Requirements Procedure

**Quality Assurance Standards**

The FBI issued two sets of QAS: (1) QAS for Forensic DNA Testing Laboratories, effective September 1, 2011 (Forensic QAS); and (2) QAS for DNA Databasing Laboratories, effective September 1, 2011, (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 reviewed the Laboratory’s most recent annual external review and 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.

\(^{16}\) The FBI Flowchart is guidance issued to NDIS-participating laboratories separate from the NDIS Operational Procedures. The flowchart is contained in the 2013 CODIS Administrator’s Handbook and has been provided to laboratories in forums such as CODIS conferences.
• 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 the 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 2 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.
February 23, 2015

David J. Gaschke
Regional Audit Manager
San Francisco Regional Audit Office
Office of the Inspector General
U.S. Department of Justice
90 7th Street Suite 3-100
San Francisco, CA 94103

Dear Mr. Gaschke:

This letter is to confirm our agreement with recommendations 1-6, stated in the draft report provided on February 6, 2015.

The laboratory has one comment with regard to Recommendation 3. The laboratory secured the CODIS terminal in a limited access room during the course of the audit. The terminal was placed in the CODIS server room which is only accessible to CODIS users.

Sincerely,

WAYNE KIMOTO
Forensic Laboratory Director
Scientific Investigation Section

Exterior view of CODIS room

Interior view of CODIS room

17 Attachments to this response were not included in this final report.
The FBI's Response to the Draft Audit Report

Dear Mr. Gaschke:

Your memorandum to Director Comey forwarding the draft audit report for the Honolulu Police Department Scientific Investigation Section Forensic Laboratory, Honolulu, Hawaii ("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 and Quality Assurance Standards for DNA Databasing Laboratories. The FBI CODIS Unit agrees with each of six recommendations detailed in the draft report.

With respect to recommendation one relating to the adherence of the Laboratory to its National DNA Index System (NDIS) match policy, the FBI CODIS Unit is working with the Laboratory to reach a mutually acceptable plan that will allow for timely resolution of its matches.

With respect to recommendation two relating to the adherence of the Laboratory to its NDIS match policy, the FBI CODIS Unit is working with the Laboratory to reach a mutually acceptable plan for the maintenance of appropriate case file documentation.

With respect to recommendation three relating to the adequate physical security of the CODIS terminal, the Laboratory has placed the terminal in its CODIS server room which is secure and is only accessible to CODIS Users. The FBI recommends closure of this recommendation.

With respect to recommendation four relating to the adequate physical security of the doors to the SIS and the forensic evidence storage room, the Laboratory now keeps the door to the forensic evidence storage room and the door to the SIS closed. Both doors automatically lock when closed and require keyless access. The FBI CODIS Unit is working with the Laboratory to reach a mutually acceptable plan that ensures that the doors will not be propped open in the future.

With respect to recommendation five relating to the technical review of all DNA profiles prior to NDIS upload, the Laboratory has implemented a new technical review form that clearly delineates review activities. Each step of the review process is now documented on the form which requires the reviewer to sign and date when review activities are performed. A copy of the new form is attached for your review and approval. The FBI recommends closure of this recommendation.

With respect to recommendation six relating to the secondary review for CODIS eligibility prior to upload as required by the Quality Assurance Standards, the Laboratory is using the same technical review form described above to document its eligibility review. The review process...
requires the reviewer to sign and date when review activities are performed. The FBI recommends closure of this recommendation.

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

Sincerely,

Tina M. Delgado
Section Chief
Biometrics Analysis Section
FBI Laboratory
APPENDIX 5

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

The OIG provided a draft of this audit report to the Honolulu Police Department Scientific Investigation Section Forensic Laboratory (Laboratory) in Honolulu, Hawaii and to the FBI. The Laboratory’s response is incorporated as Appendix 3 of this final report, and the FBI’s response is included as Appendix 4.18 The following provides the OIG analysis of the responses and summary of actions necessary to close the report.

Recommendation:

1. **Ensure the Laboratory maintains documentation of its good faith effort for timely resolution of matches.**

   **Resolved.** In response to our report, the Laboratory and the FBI agreed with our recommendation. The FBI stated in its response that it was working with the Laboratory to reach a mutually acceptable plan to allow for the timely resolution of matches. The Laboratory’s match policy at the time of our review stated that the offender laboratory contacted for match follow-up must make a good faith effort to review its DNA data and respond to the requesting laboratory within 30 business days of the request. In our report, we found that for three of the nine matches we reviewed, the Laboratory did not resolve the matches in a timely manner. This recommendation can be considered for closure when we receive the FBI’s and the Laboratory’s plan for how the Laboratory will adhere to the NDIS match policy and maintain appropriate case file documentation. Based on these plans, we may request additional evidence that corrective action has been implemented.

2. **Ensure the Laboratory maintains appropriate documentation of timely notification to law enforcement agencies of all confirmed matches.**

   **Resolved.** In response to our report, the Laboratory and the FBI agreed with our recommendation. The FBI stated in its response, that it is working with the Laboratory to reach a mutually acceptable plan for the maintenance of appropriate case file documentation. The Laboratory’s match policy at the time of our review instructed the offender laboratory that was contacted for match follow-up to make a good faith effort to review its DNA data and respond to the requesting laboratory within 30 business days of the request. However, the Laboratory’s match policy does not require investigators to be

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18 The technical review form, provided by both the Laboratory and the FBI was not appended to the final report because it is considered a law enforcement sensitive document.
notified of a match in a timely manner or to maintain documentation of that notification.

As we state in our report, of the four instances in which the Laboratory was required to notify the investigator of a match: (1) the Laboratory notified the investigator timely within two weeks for two of the matches, (2) the investigator was notified 20 business days after the match was confirmed for one match, and (3) the Laboratory was unable to determine if or when the investigator had been notified based on the case file documentation for one match. Without the timely notification of matches, investigators cannot expeditiously follow-up on investigative leads. This recommendation can be considered for closure when we receive the FBI’s and the Laboratory’s plan for how the Laboratory shall maintain appropriate documentation of timely notification to law enforcement agencies of all confirmed matches. Once we receive the Laboratory’s plan, we may request additional evidence that corrective action has been implemented.

3. **Ensure the Laboratory adequately safeguards the CODIS terminal and limits access to only approved personnel.**

   Closed. In its response to our report, the FBI and the Laboratory agreed with our recommendation. The Laboratory provided evidence that the CODIS terminal had been adequately secured and moved from the Laboratory’s general office area to the CODIS server room. Based on this action, the FBI recommended closure of this recommendation. In our report, we state that the CODIS terminal was not adequately safeguarded as it was located in a cubicle within the general office area of the Scientific Investigation Section (SIS), where anyone with access to the SIS, which at the time of our site visit, consisted of at least 47 employees, had physical access to the CODIS terminal. Of the 47 employees with access to SIS, only 7 were CODIS users with a need to access the CODIS terminal. Based on the evidence provided by the Laboratory on how it secured the CODIS terminal, we consider this recommendation closed.

4. **Ensure the Laboratory secures the doors to the SIS and the forensic evidence storage room within the Laboratory at all times.**

   Resolved. In its response to our report, the FBI and the Laboratory agreed with our recommendation. The FBI stated that the Laboratory now keeps the door to the evidence storage room and the door into the SIS closed. In addition, both doors automatically lock when closed and keyed access is required. The FBI stated that it is working with the Laboratory to reach a mutually acceptable plan to ensure that the doors will not be propped open in the future. In our report, we noted instances where the doors to the SIS were propped open, which could allow unauthorized personnel to gain access to the SIS. We also observed that the evidence storage room door was propped open. In the evidence storage room, evidence was stored on open shelves and in an unlocked refrigerator. We believe that evidence in storage
should be kept secure, even though the storage area may be in a locked and secured laboratory space. This recommendation can be considered for closure when we receive both the FBI’s and the Laboratory’s plan for how the Laboratory will ensure that the doors will not be propped open in the future. Based on these plans, we may request additional evidence that corrective action has been implemented.

5. **Ensure that the Laboratory technically reviews all DNA profiles prior to upload into NDIS.**

Resolved. In its response to our report, the FBI and the Laboratory agreed with our recommendation. The FBI stated that the Laboratory implemented a new technical review checklist (TRC) that delineates review activities. Each step of the review process is now documented on the TRC and the reviewer is required to sign and date when each review activity is performed. The Laboratory provided evidence of the updated TRC and the FBI recommended closure of this recommendation.

The Laboratory’s policy at the time of our review stated that completion of the TRC was indicated by the reviewer’s signature. The Laboratory’s policy also indicated that the TRC must be completed and signed prior to NDIS upload. However, we found the Laboratory had uploaded seven forensic profiles to NDIS prior to the TRC being signed. The CODIS Administrator explained that the seven profiles were reviewed for CODIS eligibility prior to CODIS upload but because the CODIS eligibility section of the TRC had been moved on the checklist, it did not reflect the accurate date of when the reviews had occurred. This recommendation can be considered for closure when we receive evidence from the Laboratory that use of the updated TRC has been implemented.

6. **Ensure that the Laboratory performs a secondary review for CODIS eligibility prior to upload as required by the QAS, and that documentation of the review is maintained.**

Resolved. In its response to our report, the FBI and the Laboratory agreed with our recommendation. The FBI stated that the Laboratory implemented a new TRC that delineates review activities. Each step of the review process is now documented on the TRC and the reviewer is required to sign and date when each review activity is performed. The Laboratory also provided evidence of the revised TRC and the FBI recommended closure of this recommendation.

According to the FBI’s QAS for Forensic DNA Testing Laboratories, prior to uploading or searching a DNA profile in CODIS, the technical reviewer must verify the following criteria: (1) the DNA profile is eligible for CODIS upload; (2) the correct DNA type has been entered; and (3) the appropriate specimen category has been selected. During our review of 100 forensic profiles, we found that 42 profiles were uploaded to NDIS prior to the Laboratory documenting the secondary review for CODIS eligibility as
required by the FBI’s QAS. The CODIS Administrator explained that the profiles had been reviewed for CODIS eligibility prior to CODIS upload but because the CODIS eligibility section of the TRC had been moved on the checklist, the TRC did not reflect the accurate date of when the review had occurred. This recommendation can be considered for closure when we receive evidence that the Laboratory has updated and implemented use of a revised TRC that accurately records the date of CODIS eligibility review.