RadNuc Program

Audit Report 202223-31

May 15, 2024

Executive Summary

The Florida Highway Patrol's (FHP) Office of Commercial Vehicle Enforcement (CVE) includes a Radiological/Nuclear (RadNuc) program that is comprised of six core members whose purpose is to assist other Florida state agencies, federal agencies, and other state agencies with the prevention of radiological or nuclear incidents. Members of RadNuc work with Preventative Radiological Nuclear Detection (PRND) devices/detection systems and perform radiological inspections of commercial vehicles transporting hazardous materials. RadNuc members also conduct law enforcement and other interdiction activities including patrol and detection details at special, high-profile, or large public events, including NASCAR races, air shows, and sporting events such as the Super Bowl.

RadNuc members deploy teams when requested to other states like Alabama, North Carolina, Georgia, and Ohio. RadNuc members also coordinate and work closely with several Florida state agencies, local sheriff's offices, and federal agencies including but not limited to:

- U.S. Department of Energy;
- U.S. Department of Homeland Security (DHS), Countering Weapons of Mass Destruction Unit;
- Florida Department of Transportation; (FDOT);
- Florida Department of Law Enforcement (FDLE);
- Florida Department of Health's (FDOH), Bureau of Radiation Control;
- Florida Fish and Wildlife Conservation Commission; and
- Local sheriff's offices.

During the 2022-2023 Fiscal Year, FHP spent $488,936 on total expenses for the RadNuc program.

The purpose of this audit was to evaluate the efficiency and effectiveness of FHP's RadNuc program and compliance with applicable laws, Department policy and procedure. We reviewed RadNuc program policies and procedures; oversight activities; physical security controls of equipment; testing of the equipment; and the requirements and methods of training the members. We also obtained a list of PRND inventory property records and compared the list with the requirements of Rule 69I-72.002 and Rule 69I-72.003, Florida Administrative Code (F.A.C.). We further reviewed a sample of equipment to ensure it was accounted for by headquarters and field office inventory custodians.

Our review determined the PRND policies and procedures should be updated. We noted that FHP Policy 17.26, *PRND,* and the *PRND Standard Operating Procedures (SOP) Guide* contain information inconsistent with the organization and program practices in place at the time of our audit. Updating written policies and procedures would help promote the quality and consistency of operations and ensure RadNuc members understand and meet their responsibilities. We recommend that CVE management update formal policies and procedures relating to the RadNuc program to establish clear responsibilities and accountability for RadNuc operations. Updated policies and procedures should include requirements for calibrating PRND devices, required training courses, and the frequency of conducting training. We also recommend that CVE management implement a process to ensure policies and procedures are periodically reviewed and updated.

Our review also determined the accuracy of property records, and the timeliness of inventory could be improved. We noted that 8 property items had the location code listed for general headquarters in Tallahassee, but the items were stored in various physical locations around the state. We also noted that 19 property records were not inventoried or documented during the required time frame (i.e. the end of December). The PRND equipment is a valuable asset to the Department. Having detailed and updated property records is a crucial control to prevent lost or stolen items. We recommend that CVE management ensure PRND property custodians and inventory appointees maintain accurate and current inventory and property records. We also recommend that CVE management implement a process to ensure inventory of PRND property and equipment is conducted by the end of December of each year.

FHP's CVE management concurred with the findings and recommendations and has begun implementing corrective actions.

Background and Introduction

FHP's RadNuc mission is to enhance homeland security for Florida's residents and visitors. RadNuc members use an array of PRND devices/detection systems to identify illicit shipments of radioactive materials by performing commercial vehicle inspections and detecting individuals possessing RadNuc material. RadNuc members utilize this equipment while patrolling roads, special events, and intelligence-driven locations. RadNuc members use the following PRND equipment:

- Spectroscopic Personal Radiation Detector (SPRD) – This is a small, pager-sized device that is considered the first line of defense. It will alert the user when a source of radiation is nearby and can also provide a preliminary identification of some radiological sources.

- Radiation Isotope Identification Device (RIID) – This device is used strictly to identify radiological sources. It is usually needed when a package is not marked or if the SPRD detects neutron radiation. Only specific CVE troopers, based on location, receive this device.
- Radiation Solutions, Inc, (RSI) Detection Backpacks – These backpacks are used during special events to do a sweep of buildings and make sure no radiation is present before the special event begins.
- Detection Systems/Platforms – Specific RadNuc vehicles are equipped with a platform system that has a full array of gamma and neutron detections used at special events to monitor pedestrians or vehicles for the presence of radiation. This equipment is also used to screen vehicles to detect radiological sources being transported on roadways.

RadNuc Policies and Procedures

RadNuc members follow certain policies, procedures, and guides while patrolling roads and detecting radiological/nuclear incidents while working at special events.

FHP Policy 17.26, *PRND* guides RadNuc members in the use of PRND devices to classify radioactive substances and to determine their legitimacy. Members utilize the protocols contained within this policy to properly share intelligence information while ensuring the safety of the community.

The *PRND SOP Guide* contains an overview of the RadNuc program, a description architecture of the relevant tasks involved in the equipping, training, use, and exercising of the PRND devices/systems, and the resources needed to support and maintain those efforts.

Monitoring and Oversight

RadNuc members are required to follow Department guidelines when requesting travel to special events or other locations within the state or out of state and when making travel-related purchases. RadNuc members use the Florida Statewide Travel Management System (STMS), to request travel authorizations and reimbursements. Similarly, RadNuc members utilize Department Purchasing Cards (P-Cards) when making travel-related purchases and are required to utilize the Works application to process the purchases.

When state or federal agencies request assistance, the PRND Coordinator considers the resources needed based on what the head agency is requesting (e.g. monitor vehicles vs pedestrians); the number of access ways that need monitoring; and other levels of security (e.g. bag checks, metal detectors, etc.).

The PRND Coordinator decides what staffing level is needed based on the request and then proposes the required number of RadNuc members to the Major and Chief of CVE for their approval. FHP's Program Planning and Administration and the Department's Chief of Staff are the final approvers when members are requested to assist other agencies.

Property Records and Inventory

CVE inventory custodians must annually account for PRND property items to ensure public safety and compliance with Department Procedure BA-5, along with avoiding potential liability and risk of theft.

Section 273.02, Florida Statutes, *Record and Inventory of Certain Property* defines "property" as equipment and other non-consumable and nonexpendable tangible personal property. Further, it specifies that the state's Chief Financial Officer establishes the requirements for the recording of property in the state's financial system and the periodic review of property for inventory purposes.

Section 273.03, F.S., *Property Supervision and Control* states the custodian shall be primarily responsible for the supervision, control, and disposition of the property in his or her custody but may delegate its use and immediate control to a person under his or her supervision.

The Department's Bureau of Accounting (BOA), Fixed Assets section maintains a list of all property for the Department, including PRND property. According to Procedure BA-5, *Tangible Property and Insurance*, tangible property is recorded and tracked using the Florida Accounting Information System (FLAIR) Property Subsystem.

The key internal controls over the PRND assets property management process include:

- Each property item is marked with a property bar code decal which bears the property identification number (i.e., a sequential number issued by the Fixed Assets section).
- Yearly, the Fixed Assets section initiates contact with each property custodian delegate and inventory appointee and requests they take inventory of property under their respective control.
- Lost, missing, or stolen items are reported to Fixed Assets by completing a Report of Missing, Lost, or Stolen Property form. Any stolen items must have a copy of the police report or an investigation report as documentation.
- If the property changes ownership or physical location, a completed transfer form must be submitted through the Department's ServiceNow Management system in order to update the FLAIR Property Subsystem.

According to Rule 69I-73.006, F.A.C., each custodian delegate shall ensure that a

complete physical inventory of all property is taken at least once each fiscal year.

PRND Equipment Testing

Testing and regularly calibrating the PRND equipment are crucial to ensure that the equipment is accurate, reliable, and suitable for detecting RadNuc materials. Calibrating equipment is necessary to be carried out regularly because instruments can deviate or drift over time due to various factors.

According to the PRND Coordinator, the SPRD devices[1] are sent to the FDOH's, Bureau of Radiation Control for calibration at least every two years.

The RIID self-calibrates with a built-in check source. This device alerts the RadNuc member with a failed warning signal when it is not functioning properly.

The detection backpacks, platforms, and the linear rad monitor are inspected by the PRND Coordinator before or during events. These detection systems display a warning signal if they are malfunctioning.

Training Methods

The National Preparedness Institute provides RadNuc members with their initial SPRD device training. The National Preparedness Institute utilizes the U.S. DHS's curriculum. Training is provided to RadNuc members and CVE members who assist them and is only required to be completed once.

Yearly, a RIID refresher training course is hosted by CVE trainers in conjunction with members of the FDOH's, Bureau of Radiation Control. They also utilize the U.S. DHS's curriculum from the National Preparedness Institute.

The detection backpack and platform systems have been used by RadNuc members since 2012. As needed, the PRND Coordinator instructs RadNuc members on how the system functions. Anytime there is an upgrade to the platform, the PRND Coordinator will reach out to either the manufacturer or the Federal Department of Energy partners to have them provide demonstrations and updated/refresher training for the RadNuc and CVE members who assist. There is no annual formal training program for the detection systems.

While not required, RadNuc members can also take online refresher courses during the year. The U.S. DHS has certified courses that are offered through the Counter Terrorism Operations Support Center which offers a variety of PRND courses.

[1] The SPRD devices are the only PRND equipment that are sent to be calibrated.

Findings and Recommendations

Improve Directive Controls

Finding No. 1: PRND policies and procedures should be updated.

FHP Policy 17.26, *PRND* provides guidance on the use of PRND equipment, objectives of the program, responsibilities of members and management, and procedures for the operation and maintenance of PRND equipment.

The *PRND SOP Guide* describes that certain types of training courses are required for primary and secondary screeners. It states that primary screeners should receive refresher training on an annual basis. It also mentions that portable instruments (SPRD) used for detection and measurement should be calibrated annually.

During our review, we noted that FHP Policy 17.26 was last revised on April 22, 2013, and contains information inconsistent with the organization and program practices in place at the time of our audit. Specifically, the policy states that the responsibility for oversight of the PRND program is vested in FHPs, Bureau of Criminal Investigations and Intelligence (BCII) section. However, the program is overseen by the FHP CVE. FHP Policy 17.26.07, *Procedures* contains further references to and responsibilities for BCII and states that the *PRND SOP Guide* will be inspected and updated by June 30th of each year. The *PRND SOP Guide* was last updated on April 22, 2013.

We also noted that the *PRND SOP Guide* likewise contains information inconsistent with the organization and program practices in place. Specifically, the “Training” portion of the procedure states that primary and secondary screeners should, at a minimum, complete certain courses. It also states that primary screeners should receive refresher training on an annual basis. At the time of our audit, SPRD device training was only required to be completed once.

Further, the *PRND SOP Guide* states that portable instruments used for the detection and measurement of radioactive materials should be calibrated annually, and the PRND Coordinator will maintain a schedule for the annual calibration of all radiological instruments. According to management at the time of our audit, calibration was conducted every two years.

After audit inquiry, CVE management stated they have begun the process of updating FHP Policy 17.26, and plan to discontinue the use of the *PRND SOP Guide*.

The duties and personnel for CVE were transferred from the FDOT to the Department under the direction of FHP in 2011. The reorganization of divisions and responsibilities within the FHP at the time of the transfer, and since, could have

contributed to management overlooking the need to update FHP Policy 17.26 and the associated *PRND SOP Guide*.

Updating written policies and procedures would help promote the quality and consistency of operations and ensure RadNuc members understand and meet their responsibilities.

Without comprehensive written procedures which include training requirements and equipment calibration expectations, RadNuc members could experience:

- Inconsistent practices among the members within the unit;
- Inability to enforce employee accountability;
- A lack of understanding of roles and responsibilities;
- Insufficiently trained members, and
- Faulty or malfunctioning PRND equipment.

Recommendations

We recommend CVE management update formal policies and procedures relating to the RadNuc program to establish clear responsibilities and accountability for RadNuc operations. Updated policies and procedures should include requirements for calibrating PRND devices, required training courses, and the frequency of conducting training.

We also recommend CVE management implement a process to ensure policies and procedures are periodically reviewed and updated.

Management Response

FHP management concurred with the finding and recommendations and has begun implementing corrective actions, including revising Policy 17.26 and the PRND SOP, and plans to implement a process to ensure policies and procedures are periodically reviewed and updated.

Property Records – Accuracy and Timeliness

Finding No. 2: The accuracy of property records and the timeliness of inventory could be improved.

Rule 69I-72.003, F.A.C. specifies that custodians shall maintain adequate records of property in their custody. It also specifies that a property record of an item should include the physical location (the city, county, address, building name, and room number).

Department Procedure BA-5 specifies that custodians should maintain an accurate record of all property items in their charge. They must conduct annual inventory within the required time frame and maintain a copy of the completed inventory report along with all related documentation such as property transfers, surplus requests, and missing, lost, or stolen reports.

Also, Department Procedure BA-5 provides that physical inventory should be a sight verification process to determine whether property items exist in the location specified on the property record. It also specifies that FLAIR property records are the basis for calculating insurable content values for each building. In addition, if the building number (location code) in the FLAIR Property Subsystem is not correct, costs for repairs or replacement could be disallowed if a loss were to occur.

While key controls exist to tag, record, and track PRND equipment inventory, PRND property custodians must be well-educated on their duties and responsibilities for key internal controls to work correctly. They must also follow the guidelines of the Department's Procedure BA-5 and the timeframe that BOA's Fixed Assets section specifies for completing the annual inventory, which is at the end of December each year.

We reviewed a list of 17 Detection Systems-Platforms inventory items in FLAIR. We noted that 4 Vehicle Radiation Detection Platforms and 4 Radiation RSI Backpack Detection Systems had a location code that did not accurately represent the physical location of the inventory item. While obtaining information from interviews with RadNuc management, we noted that the 8 items had the location code listed for general headquarters in Tallahassee, but the items were stored in various physical locations around the state, including; West Palm Beach, Brooksville, Jacksonville, and Fort Myers.

We also reviewed a sample of 39 PRND property items to determine whether property items had been documented and inventoried. Instances of the following were identified:

- 1 item could not be located and did not have documentation to support the location of the item;
- 13 items did not have inventory conducted until our audit inquiry in January 2024. All inventory is required to be physically accounted for and documented by the end of December of each calendar year; and
- 5 items were not inventoried during the 2023 calendar year. The last inventory date in the FLAIR Property Subsystem was in the Fall of 2022. After a discussion with the field office in January 2024, the items were reviewed in ServiceNow by the property custodian to ensure the items were physically accounted for and documented appropriately.

According to CVE management, the detection systems/platforms are moved around the state based on where they have special events planned. To reduce the burden on the field offices for conducting inventory on these items, management assigns the equipment to headquarters in Tallahassee and arranges for the RadNuc members to bring the equipment to a central location for inventory each year.

The most effective way to maintain an accurate inventory system is to complete a physical count of inventory at least once a year. The PRND equipment is valuable, attractive, can be easily transported, and is an important asset to the Department. Having detailed and updated property records is a crucial control to prevent lost or stolen items.

Recommendations

We recommend CVE management ensure PRND property custodians and inventory appointees maintain accurate and current inventory and property records.

We also recommend CVE management implement a process to ensure inventory of PRND property and equipment is conducted by the end of December of each calendar year.

Management Response

FHP management concurred with the finding and recommendations and has begun implementing corrective actions, including making changes to location assignments for certain equipment and notifying staff of the importance of completing annual inventory within the required timeframe.

Purpose, Scope, and Methodology

The purpose of this audit was to evaluate the efficiency and effectiveness of FHP's RadNuc program and compliance with applicable laws, Department policy and procedure.

The scope of this audit included inventory records, policies, and practices relating to the FHP's RadNuc program from July 1, 2022 to December 31, 2023.

The methodology included:

- Reviewing applicable statutes, rules, policies, and procedures;
- Interviewing appropriate Department personnel;
- Reviewing monitoring/oversight activities of the program;
- Reviewing and evaluating the adequacy of the physical security controls over PRND equipment;
- Reviewing Rule 69I-72, F.A.C. and comparing the requirements to the FLAIR Property Subsystem inventory list;
- Reviewing a sample of PRND equipment inventory records and documentation;
- Reviewing and evaluating the frequency of testing of the PRND equipment; and
- Reviewing the requirements and methods of training RadNuc members.

Acknowledgment

We would like to thank the members of the CVE RadNuc program who assisted during the audit and express our appreciation for their cooperation during the course of our examination.

Distribution, Statement of Accordance, and Project Team

Distribution

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Statement of Accordance

Section 20.055, Florida Statutes, requires the Florida Department of Highway Safety and Motor Vehicles' Inspector General to review, evaluate, and report on policies, plans, procedures, accounting, financial, and other operations of the Department and to recommend improvements. This audit engagement was conducted in accordance with applicable *International Standards for the Professional Practice of Internal Auditing* published by the Institute of Internal Auditors and *Principles and Standards for Offices of Inspector General* published by the Association of Inspectors General.

Project Team

Engagement conducted by:
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Under the supervision of:
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Approved by:

Mike Stacy, Inspector General

ATTACHMENT - Management Response

FLHSMV
FLORIDA HIGHWAY SAFETY AND MOTOR VEHICLES

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MEMORANDUM

DATE: May 9, 2024
TO: Erin Mook, Audit Director
FROM: Chief Troy Thompson, Commercial Vehicle Enforcement
SUBJECT: Management Response to the RadNuc Program Audit (202223-31)

The following is our response to the findings and recommendations presented in the report.

Finding 1: PRND policies and procedures should be updated.

Recommendations

We recommend CVE management update formal policies and procedures relating to the RadNuc program to establish clear responsibilities and accountability for RadNuc operations. Updated policies and procedures should include requirements for calibrating PRND devices, required training courses, and the frequency of conducting training.

We also recommend CVE management implement a process to ensure policies and procedures are periodically reviewed and updated.

Management Response

Florida Highway Patrol management will complete the review and updating of FHP Policy 17.26 and the PRND SOP, focusing on the following points:

- Aligning organization and program practices with current assignments and responsibilities.
- Multiple organizations exist that provide initial Primary and Secondary Screener Training with varying course names and training lengths. The Florida Highway Patrol has identified the minimum initial training standards in the procedure that Primary and Secondary Screeners must receive to operate devices. The Florida Highway Patrol will amend language for recurrent training to provide routine refresher training to Primary and Secondary screeners.
- Aligning calibration procedures with manufacturer's standards and/or best practices.

- Florida Highway Patrol management will implement a process to ensure policies and procedures are periodically reviewed and updated as provided in FHP Policy 17.26 and the PRND SOP.

Corrective Action

Florida Highway Patrol management has completed review of FHP 17.26 and the PRND SOP. Among revisions to each document, the following changes have been made:

- Organization and program practices have been aligned with current assignments and responsibilities. *See attachment 1- FHP Policy 17.26 and attachment 2 - PRND SOP.*
- The PRND-SOP has been amended to identify minimum initial and recurrent training standards FHP members will achieve during Primary and Secondary Screener training. *See attachment 2 – PRND SOP.*
- The PRND-SOP has been amended to require SPRD calibration biennially and all portable equipment to be calibrated when the system provides a calibration warning signal. This meets or exceeds standards required by the manufacturer and/or known best practices. *See attachment 2 – PRND SOP.*
- FHP Policy 17.26 and the FHP SOP requires each document be reviewed by June 30th each year to determine if revisions are necessary. *See attachment 1- FHP Policy 17.26 and attachment 2 - PRND SOP.*

Finding 2: The accuracy of property records and the timeliness of inventory could be improved.

Recommendations

We recommend CVE management ensure PRND property custodians and inventory appointees maintain accurate and current inventory and property records.

We also recommend CVE management implement a process to ensure inventory of PRND property and equipment is conducted by the end of December of each calendar year.

Management Response

Florida Highway Patrol management will ensure Property Custodians and Inventory Appointees continue to maintain records and comply with the inventory of property pursuant to FLHSMV Policy 10.01 and the Tangible Property and Insurance Procedure Manual - Procedure Number BA #5. The following actions will also be taken as recommended:

- Amend the location code for 4 Vehicle Radiation Detection Platforms and 4 Radiation RSI Backpack Detection Systems from a central location to the specific location where the equipment is normally stored.
- Remind Custodian Delegates and Inventory Appointees of the importance of completing annual inventory within the required timeframe.

Corrective Action

The Florida Highway Patrol has taken the following actions:

- The location assignments for the 4 Vehicle Radiation Detection Platforms and 4 Radiation RSI Backpack Detection Systems are being transferred from a central location to a field location where the equipment is primarily stored. *See attachment 3 – PRND Asset Location spreadsheet.*
- CVE Leadership was noticed on the importance of completing annual inventory within the required timeframe. See attachment 4 – Inventory Memorandum and attachment 5 – Email to Major Captain GSS.