

Report No. 2020-026
September 2019

STATE OF FLORIDA AUDITOR GENERAL

Operational Audit

**DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

Selected Information Technology Systems



Sherrill F. Norman, CPA
Auditor General

Secretary of the Department of Environmental Protection

The Department of Environmental Protection is established by Section 20.255, Florida Statutes. The head of the Department is the Secretary who is appointed by the Governor, with the concurrence of the Cabinet, and subject to confirmation by the Senate. During the period of our audit, the following individuals served as Department Secretary:

Noah Valenstein	From June 5, 2017
Ryan Matthews, Interim	February 4, 2017, through July 5, 2017
Jonathan Steverson	Through February 3, 2017

The team leader was Yueh-Lin Wu, CPA, and the audit was supervised by Barry L. Bell, CPA.

Please address inquiries regarding this report to Barry L. Bell, CPA, Audit Manager, by e-mail at barrybell@aud.state.fl.us or by telephone at (850) 412-2752.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Selected Information Technology Systems

SUMMARY

This operational audit of the Department of Environmental Protection (Department) focused on the Division of Air Resource Management, Office of Permitting and Compliance, and selected information technology systems. The audit also included a follow-up on the findings noted in our report No. 2017-001. Our audit disclosed the following:

Finding 1: The Department did not always timely deactivate access privileges to Department information technology (IT) systems upon an employee's separation from Department employment.

Finding 2: Some Department IT system security administrators were not subject to required background screenings.

BACKGROUND

The Department of Environmental Protection (Department) is the State's lead agency for environmental management, stewardship, and protecting the State's air, water, and land. Headquartered in Tallahassee, the Department has six regional district offices located throughout the State that review permit applications, conduct inspections of permitted facilities, respond to reports of environmental damage, and conduct compliance assistance and enforcement activities. To ensure Statewide and intradepartmental consistency, the Department's nine divisions¹ direct the district offices on matters of interpretation and applicability of Department rules and programs. For the 2017-18 fiscal year, the Legislature appropriated approximately \$1.4 billion to the Department and authorized 2,899.50 positions.²

The Department, Division of Air Resource Management (Division), is responsible for protecting and managing the State's air resource, including monitoring air quality, permitting sources of air pollution, ensuring emission source compliance, and implementing the Siting Acts.³ The Division executes these responsibilities through four offices: the Office of Business Planning, the Office of Air Monitoring, the Siting Coordination Office, and the Office of Permitting and Compliance (Office), which coordinates Statewide regulatory activities among the State's district air programs, local air programs, and the United States Environmental Protection Agency (EPA). The Office's Statewide regulatory activities include:

- Permitting to operate major sources of air pollution in accordance with Title V of the Clean Air Act.
- Permitting of minor sources of air pollution.

¹ Section 20.255(3), Florida Statutes, establishes the following Department divisions: Division of Administrative Services; Division of Air Resource Management; Division of Water Resource Management; Division of Environmental Assessment and Restoration; Division of Waste Management; Division of Recreation and Parks; Division of State Lands; the Division of Water Restoration Assistance; and the Division of Law Enforcement.

² Chapter 2017-70, Laws of Florida.

³ The Siting Acts (Sections 403.501 through 403.518, 403.52 through 403.5365, and 403.9401 through 403.9425, Florida Statutes) establish procedures for licensing the construction and operation of power plants, transmission lines, and natural gas pipelines.

- Providing compliance assistance and conducting enforcement activities related to permits and regulations.
- Collecting Title V operating fees.
- Maintaining the State’s air pollution database, the Air Resource Management System (ARMS).⁴

Pursuant to State law,⁵ the Office issues permits for major and minor stationary sources of air pollutants that specify emission limits and requirements for construction and operation and collects related permit fees. Facility owners and operators may submit permit applications through the Electronic Permit Submittal and Processing System (EPSAP)⁶ or the Air General Permit Electronic Registration System (AGPERS),⁷ and the Office maintains permit documentation in ARMS.

The Office is responsible for conducting compliance and enforcement activities and maintains compliance-related documentation in the AirCom system.⁸ The Office established agreements with eight local air programs⁹ to take lead responsibility for permitting, compliance, and enforcement activities in the programs’ geographical areas. As of July 2018, the Office had 19 established positions and, during the period July 2016 through January 2018, expended approximately \$2.7 million and collected permit-related revenues totaling approximately \$4 million. As of February 19, 2018, the Office was responsible for administering 3,743 active permits.

FINDINGS AND RECOMMENDATIONS

Finding 1: IT Access Privilege Controls

Agency for State Technology (AST)¹⁰ rules¹¹ require State agencies to ensure that information technology (IT) access privileges are deactivated when access to an IT resource is no longer required. Accordingly, Department policies and procedures¹² required access privileges be deactivated when a user’s employment was terminated or access to the information resource was no longer required. Prompt action to deactivate access privileges is necessary to help prevent the misuse of the access privileges.

⁴ The Department uses ARMS to store information about a regulated air facility, including facility name, owner, location, regulatory classification, emission units, pollutants, operational limits, and fuels.

⁵ Sections 403.087 and 403.0872, Florida Statutes.

⁶ The EPSAP provides regulated facility owners and operators the ability to submit air permit applications electronically and provides permitting offices the ability to review applications online. Upon issuance of an air permit, the data in EPSAP is uploaded into ARMS.

⁷ AGPERS is an automated registration system that allows businesses to register, renew, change ownership, or make administrative corrections to air general permits online.

⁸ The Department uses the AirCom system to record compliance and enforcement activities at permitted facilities and to report related information to the EPA.

⁹ The eight local air programs were administered by Broward County, Duval County and the City of Jacksonville, Hillsborough County, Miami-Dade County, Orange County, Palm Beach County, Pinellas County, and Sarasota County.

¹⁰ Effective July 1, 2019, Chapter 2019-118, Laws of Florida, created the Division of State Technology within the Department of Management Services and transferred the existing powers, duties, functions, personnel, records, property, and funds of the Agency for State Technology to the Division of State Technology.

¹¹ AST Rule 74-2.003(1)(a)8., Florida Administrative Code.

¹² Department Policy and Procedure DEP 390, *Information Technology Security Policies and Standards*.

As part of our audit, we evaluated whether ARMS, ARMS Permitting Application (PA),¹³ Cash Receiving Application (CRA),¹⁴ Electronic Annual Operating Report System (EAOR),¹⁵ and EPSAP access privileges were timely deactivated upon a user's separation from Department employment. Our examination of applicable system access and People First¹⁶ records disclosed that the Department did not always timely deactivate user access privileges when employees separated from Department employment. Specifically, we found that, during the period July 2016 through January 2018:

- Access privileges for 15 of the 44 Department employees with ARMS and ARMS PA access privileges remained active 2 to 89 business days (an average of 10 business days) after the employees' separation dates. Additionally, the access privileges for the 2 Department employees with only ARMS access privileges remained active 3 and 20 business days after the employees' separation dates.
- Access privileges for 6 of the 14 Department employees with CRA access privileges remained active 2 to 43 business days (an average of 23 business days) after the employees' separation dates.
- Access privileges for 3 of the 23 Department employees with EAOR access privileges remained active 3 to 89 business days (an average of 32 business days) after the employees' separation dates.
- Access privileges for 3 of the 13 Department employees with EPSAP access privileges remained active 4 to 89 business days (an average of 35 business days) after the employees' separation dates.

In response to our audit inquiry, Department management indicated that the delays in deactivating CRA access privileges were due to the Department's reliance on quarterly user account audits to identify user accounts that should be deactivated. Department management indicated that the other system access privileges were not timely deactivated due to program offices not timely providing employee termination information to the Department's Office of Information Technology Services, which was responsible for deactivating employee access privileges.

Timely deactivating user accounts upon an employee's separation from Department employment reduces the risk that access privileges may be misused by the former employee or others.

Recommendation: We recommend that Department management ensure that user access privileges are deactivated immediately upon an employee's separation from Department employment.

¹³ The ARMS PA is a database used by the Department to store permit processing information and to relate permit projects to ARMS facility information.

¹⁴ The Department uses the CRA to track cash received by the Department.

¹⁵ EAOR is used by facilities to submit annual emissions data to the Department for review.

¹⁶ People First is the State's human resource information system.

Finding 2: Background Screenings

State law¹⁷ and Department policies and procedures¹⁸ require all employees in positions of special trust, responsibility, or sensitive location undergo a level 2 background screening¹⁹ as a condition of employment. Additionally, AST rules²⁰ specify that State agencies are responsible for performing background checks on all individuals hired as IT workers with access to information processing facilities or who have system, database, developer, network, or other administrative capabilities for systems, applications, or servers with risk categorization of moderate-impact or higher. Pursuant to these requirements, Department policies and procedures²¹ specified that all IT positions were positions of special trust.

As part of our audit, we examined Department records for the Department security administrators responsible for the administration and maintenance of selected Department IT systems during the period July 2016 through January 2018 to determine whether the employees had been subject to a level 2 background screening. Our examination disclosed that certain Department security administrators had not received a level 2 background screening. Specifically:

- A security administrator responsible for AirCom, ARMS and ARMS PA, EAOR, EPSAP, and OCULUS.²²
- A security administrator responsible for AirCom, ARMS and ARMS PA, EPSAP, and OCULUS.
- A security administrator responsible for EAOR.
- A security administrator responsible for EPSAP.

Additionally, Department management indicated that the Department does not require security administrators to undergo periodic screenings as a condition of employment.

According to Department management, the security administrators had not been subject to a level 2 background screening at the time of hire because they were hired prior to the Department's implementation of background screening requirements in May 2006. Notwithstanding Department management's response, the conduct of background screenings when individuals are employed in positions of special trust provides Department management greater assurance that only those individuals with appropriate backgrounds are employed and granted access to Department IT systems.

Recommendation: We recommend that Department management ensure that all employees in positions of special trust undergo a level 2 background screening in accordance with State law.

¹⁷ Section 110.1127(2)(a), Florida Statutes.

¹⁸ Department Administrative Directive DEP 422, *Background Investigation*, effective March 13, 2009.

¹⁹ As defined in Section 435.04, Florida Statutes, level 2 background screenings include, but need not be limited to, fingerprinting for Statewide criminal history records checks through the Department of Law Enforcement, national criminal history records checks through the Federal Bureau of Investigation, and may include local criminal history records checks through local law enforcement agencies.

²⁰ AST Rule 74-2.002(1)(f)9., Florida Administrative Code.

²¹ Department Policy and Procedure DEP 390, *Information Technology Security Policies and Standards*.

²² OCULUS is the Department's general document management tool.

PRIOR AUDIT FOLLOW-UP

The Department had taken corrective actions for the findings included in our report No. 2017-001.

OBJECTIVES, SCOPE, AND METHODOLOGY

The Auditor General conducts operational audits of governmental entities to provide the Legislature, Florida's citizens, public entity management, and other stakeholders unbiased, timely, and relevant information for use in promoting government accountability and stewardship and improving government operations.

We conducted this operational audit from January 2018 through June 2019 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.

This operational audit of the Department of Environmental Protection (Department) focused on the Division of Air Resource Management, Office of Permitting and Compliance, and selected information technology (IT) systems. The overall objectives of the audit were:

- To evaluate management's performance in establishing and maintaining internal controls, including controls designed to prevent and detect fraud, waste, and abuse, and in administering assigned responsibilities in accordance with applicable laws, administrative rules, contracts, grant agreements, and other guidelines.
- To examine internal controls designed and placed in operation to promote and encourage the achievement of management's control objectives in the categories of compliance, economic and efficient operations, the reliability of records and reports, and the safeguarding of assets, and identify weaknesses in those internal controls.
- To identify statutory and fiscal changes that may be recommended to the Legislature pursuant to Section 11.45(7)(h), Florida Statutes.

Our audit also included steps to determine whether management had corrected, or was in the process of correcting, all deficiencies noted in our report No. 2017-001.

This audit was designed to identify, for those programs, activities, or functions included within the scope of the audit, deficiencies in management's internal controls, instances of noncompliance with applicable governing laws, rules, or contracts, and instances of inefficient or ineffective operational policies, procedures, or practices. The focus of this audit was to identify problems so that they may be corrected in such a way as to improve government accountability and efficiency and the stewardship of management. Professional judgment has been used in determining significance and audit risk and in selecting the particular transactions, legal compliance matters, records, and controls considered.

As described in more detail below, for those programs, activities, and functions included within the scope of our audit, our audit work included, but was not limited to, communicating to management and those charged with governance the scope, objectives, timing, overall methodology, and reporting of our audit; obtaining an understanding of the program, activity, or function; exercising professional judgment in

considering significance and audit risk in the design and execution of the research, interviews, tests, analyses, and other procedures included in the audit methodology; obtaining reasonable assurance of the overall sufficiency and appropriateness of the evidence gathered in support of our audit's findings and conclusions; and reporting on the results of the audit as required by governing laws and auditing standards.

Our audit included the selection and examination of transactions and records. Unless otherwise indicated in this report, these transactions and records were not selected with the intent of statistically projecting the results, although we have presented for perspective, where practicable, information concerning relevant population value or size and quantifications relative to the items selected for examination.

An audit by its nature, does not include a review of all records and actions of agency management, staff, and vendors, and as a consequence, cannot be relied upon to identify all instances of noncompliance, fraud, abuse, or inefficiency.

In conducting our audit, we:

- Reviewed applicable laws, rules, Department policies and procedures, and other guidelines, and interviewed Department personnel to obtain an understanding of air permitting and compliance processes.
- Obtained an understanding of selected Department IT controls, assessed the risks related to those controls, evaluated whether selected general and application IT controls were in place, and tested the effectiveness of the controls for the following IT systems:
 - AirCom.
 - Air General Permit Electronic Registration System (AGPERS).
 - Air Resource Management System (ARMS).
 - ARMS Permitting Application (ARMS PA).
 - Cash Receiving Application (CRA).
 - Electronic Annual Operating Report System (EAOR).
 - Electronic Permit Submittal and Processing System (EPSAP).
 - OCULUS.
- Performed inquiries of Department personnel and examined Department records to determine whether security administrators for the following IT systems received a level 2 background screening:
 - AirCom.
 - AGPERS.
 - ARMS.
 - ARMS PA.
 - CRA.
 - EAOR.
 - EPSAP.
 - OCULUS.

- Performed inquiries of Department personnel and reviewed applicable laws, rules, and Department policies and procedures to determine whether the Department had adequately designed controls for the administration of air resource permits and the compliance inspection process.
- Determined whether permits were issued in accordance with State law and permit fees were appropriately charged and timely collected. Specifically, we selected and examined Department records for:
 - 25 of the 540 air pollution source construction permits issued or renewed during the period July 2016 through January 2018.
 - 25 of the 284 minor air pollution source operation permits issued or renewed during the period July 2016 through January 2018.
 - 25 of the 297 Title V permits issued or renewed during the period July 2016 through January 2018.
 - 25 of the 995 air pollutant emitting facility general permits issued or renewed during the period July 2016 through January 2018.
 - 10 of the 89 Federally Enforceable State Operation permits issued or renewed during the period July 2016 through January 2018.
- From the population of 2,496 routine compliance inspections and 80 follow-up inspections conducted during the period July 2016 through January 2018, examined Department records for 35 selected routine compliance inspections and 5 selected follow-up inspections to determine whether the Department had established an effective compliance inspection and follow-up process that ensured major and minor stationary sources of air pollutants met State standards.
- Determined whether required compliance reports, including Semi-Annual Monitoring Reports, Annual Statements of Compliance, and Annual Operation Reports, were timely received from Title V facilities and True Minor Source facilities and reviewed by the Department. Specifically, we selected and examined Department records related to the reports submitted by:
 - 20 of the 376 Title V facilities that had active permits during the period July 2016 through January 2018.
 - 5 of the 397 True Minor Source facilities that had active permits during the period July 2016 through January 2018.
- From the population of 114 monthly oversight audits conducted during the period July 2016 through January 2018, examined Department records for 12 selected monthly oversight audits to determine whether the Department adequately monitored the eight local programs' permitting, compliance, and enforcement activities.
- From the population of 36 quarterly Title V status reports required to be submitted to the Department by the eight local air programs during the period July 2016 through January 2018, examined Department records for 5 selected quarterly Title V status reports to determine whether the Department adequately monitored the local air programs' delivery of permitting, compliance, and enforcement activities.
- Analyzed Florida Accounting and Information Resource Subsystem (FLAIR) data for the period July 2016 through January 2018 to determine whether permit fees established pursuant to Sections 403.087(6)(a) and 403.0872(11)(b), Florida Statutes, were sufficient to cover the costs of permitting, surveillance, or other support activities associated with air pollution permits and all reasonable costs to develop and administer the Major Stationary Source Air Operation Permit program.

- Determined whether permit fees were timely collected, appropriately recorded in FLAIR, and deposited in accordance with Sections 403.0871 and 403.0874, Florida Statutes. Specifically, we selected and examined Department records for:
 - 25 of the 327 permit fee revenue receipts, totaling \$43,838,155, deposited in the Air Pollution Control Trust Fund during the period July 2016 through January 2018.
 - 15 of the 835 permit fee revenue receipts, totaling \$515,200, deposited in the Permit Fee Trust Fund during the period July 2016 through January 2018.
- Performed inquiries of Department personnel and, from the population of 19 monthly ARMS-PA to CRA and 19 monthly CRA to FLAIR reconciliations completed during the period July 2016 through January 2018, examined Department records for 6 selected monthly reconciliations (3 ARMS-PA to CRA and 3 CRA to FLAIR) to determine whether the Department ensured that information recorded in AMRS-PA, CRA, and FLAIR was accurate and complete, and whether reconciling items were timely and appropriately resolved.
- Determined whether Office expenditures were in correct amounts and adequately documented; made in accordance with applicable laws and rules; properly authorized and approved; and properly expended from the Permit Fee Trust Fund or the Air Pollution Control Trust Fund. Specifically, we examined Department records for:
 - 15 selected payroll expenditures, totaling \$71,110, from the population of 543 payroll expenditures, totaling \$1,609,844, made during the period July 2016 through January 2018.
 - 10 travel expenditure transactions, totaling \$1,368, from the population of 82 travel expenditure transactions, totaling \$11,567, made during the period July 2016 through January 2018.
 - 15 reimbursement payments, totaling \$331,777, from the population of 60 Title V fee reimbursement payments, totaling \$523,028, made to the local air programs during the period July 2016 through January 2018.
- Evaluated Department actions to correct the findings noted in our report No. 2017-001. Specifically, we:
 - Reviewed the Coastal Construction Control Line (CCCL) *Permit Application Routing Form (Form)* to determine whether the *Form* required Department staff to document any permitting requirements that were waived, including an explanation for waiving the requirements.
 - Reviewed the *CCCL Procedures Manual for Permit Managers (Manual)* to determine whether the *Manual* reflected the current organizational structure and electronic permitting process.
 - From the population of 796 CCCL permits issued during the period July 2016 through January 2018, examined Department records for 30 selected CCCL permits to determine whether: the applicant submitted the correct permit application, including required supplementary documentation; the application and supporting documentation were reviewed and approved by appropriate staff; the permit writer and supervisor's review and approval were documented; and the applicable *Form* was completed by the permit manager to document the review of the CCCL permitting application file.
 - Interviewed Department personnel, reviewed Department policies and procedures, and examined Department records to determine whether appropriate user authentication security controls relating to the Beaches and Coastal Management system and the Permitting Application system were adequately designed to ensure the confidentiality, integrity, and availability of Department data and related IT resources.
- Observed, documented, and evaluated the effectiveness of selected Department processes and procedures for:

- Budgetary activities, managing FLAIR access privileges, settlement agreements, fixed capital outlay, collecting and utilizing social security numbers, and financial reconciliations.
- The administration of tangible personal property in accordance with applicable guidelines. As of January 2018, the Department was responsible for 13,649 tangible personal property items with related acquisition costs totaling \$122,938,486.
- The assignment and use of motor vehicles. As of January 2018, the Department was responsible for 1,219 motor vehicles with related acquisition costs totaling \$26,775,876.
- The administration of Department contracts. During the period July 2016 through January 2018, the Department was responsible for 1,347 active contracts totaling \$2,006,528,295.
- The assignment and use of mobile devices with related costs totaling \$331,239 during the period July 2016 through January 2018.
- The administration of the requirements of the Florida Single Audit Act. During the period July 2016 through January 2018, the Department expended \$615,502,976 for 26 State Financial Assistance programs.
- The acquisition and management of real property leases in accordance with State law, Department of Management Services rules, and other applicable guidelines. As of March 12, 2018, the Department was responsible for 24 real property leases.
- The administration of hurricane-related contracting and purchasing activities. During the period July 2016 through January 2018, the Department expended \$68,075,585 related to hurricane activity impacting the Department for eight Governor-declared emergencies.
- Communicated on an interim basis with applicable officials to ensure the timely resolution of issues involving controls and noncompliance.
- Performed various other auditing procedures, including analytical procedures, as necessary, to accomplish the objectives of the audit.
- Prepared and submitted for management response the findings and recommendations that are included in this report and which describe the matters requiring corrective actions. Management's response is included in this report under the heading **MANAGEMENT'S RESPONSE**.

AUTHORITY

Section 11.45, Florida Statutes, requires that the Auditor General conduct an operational audit of each State agency on a periodic basis. Pursuant to the provisions of Section 11.45, Florida Statutes, I have directed that this report be prepared to present the results of our operational audit.



Sherrill F. Norman, CPA
Auditor General

MANAGEMENT'S RESPONSE



FLORIDA DEPARTMENT OF Environmental Protection

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Ron DeSantis
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September 9, 2019

Ms. Sherrill F. Norman, CPA
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Dear Ms. Norman:

Enclosed is the Department's response to the preliminary and tentative findings for the operational audit of the Department of Environmental Protection, Selected Information Technology Systems. Thank you for the opportunity to review and comment on this audit report. If you have questions or require additional information, please contact Candie Fuller, Inspector General, at (850) 245-2548.

Sincerely,

A handwritten signature in blue ink that reads "Noah Valenstein".

Noah Valenstein
Secretary

NV/cmf

Enclosures

cc: Darica Smith, Chief of Staff
John Truitt, Deputy Secretary, Regulatory Programs
Darinda McLaughlin, Director, Division of Administrative Services
Jeff Koerner, Director, Division of Air Resource Management
Warren Sponholtz, Chief Information Officer

Department of Environmental Protection
Response to Preliminary and Tentative Audit Findings
Auditor General Operational Audit

This operational audit of the Department of Environmental Protection (Department) focused on the Division of Air Resource Management, Office of Permitting and Compliance, and selected information technology systems. The audit also included a follow-up on the findings noted in Auditor General report No. 2017-001.

Finding 1: IT Access Privilege Controls

The Department did not always timely deactivate access privileges to Department information technology (IT) systems upon an employee's separation from Department employment.

Recommendation: We recommend that Department management ensure that user access privileges are deactivated immediately upon an employee's separation from Department employment.

Department Response: The Department agrees and will ensure that user access privileges are deactivated upon an employee's separation from Department employment.

Finding 2: Background Screenings

Some Department IT system security administrators were not subject to required background screenings.

Recommendation: We recommend that Department management ensure that all employees in positions of special trust undergo a level 2 background screening in accordance with State law.

Department Response: The Department agrees and will ensure that all employees in positions of special trust, including IT system security administrators, undergo a level 2 background screening in accordance with State law.