SAN BERNARDINO COUNTY
AUDITOR-CONTROLLER/TREASURER/TAX COLLECTOR
INTERNAL AUDITS DIVISION

FLEET MANAGEMENT DEPARTMENT:
INFORMATION SYSTEMS SECURITY CONTROLS AUDIT

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Information Systems Security Controls Audit

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June 13, 2023

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RE: Information Systems Security Controls Audit

We have completed an audit of the Fleet Management Department's (Department) Information Systems Security Controls. The primary objective of the audit was to determine whether security controls over identity and access management in the Department's information systems were in place and effective as of the date of fieldwork, December 16, 2021. We conducted our audit in accordance with the International Standards for the Professional Practice of Internal Auditing established by the Institute of Internal Auditors.

We identified procedures and practices that could be improved. We have listed these areas for improvement in the Audit Findings and Recommendations section of this report.

We sent a draft report and discussed our observations with management on April 27, 2023. The Department's responses to our recommendations are included in this report.

We would like to express our appreciation to the personnel at the Department who assisted and cooperated with us during this engagement.

Respectfully submitted,

Ensen Mason CPA, CFA
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By: _____
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Summary of Audit Results

Our findings and recommendations are provided to assist management in strengthening internal controls and procedures related to the Department's information systems security controls.

The table below summarizes the audit findings and recommendations for this audit engagement. For further discussion, refer to the *Audit Findings and Recommendations* section of this report.

Finding No.	Findings and Recommendations	Page No.
1	**Passwords were not changed periodically.** We recommend the Department develop, implement, and communicate procedures regarding password strength and change frequency requirements. Additionally, we recommend that passwords be periodically changed according to the established Department procedures.	6
2	**Access to information systems was not removed when employees terminated County employment.** We recommend the Department develop, implement, and communicate procedures to perform documented reviews of active user accounts and compare them to terminated employee listings. Additionally, we recommend the Department periodically review active user accounts and compare them to terminated employee listings according to the established Department procedures.	7

Information Systems Security Controls Audit

The Department

The San Bernardino County Fleet Management Department (Department) provides acquisition, maintenance, repair, modification, and disposal services for the majority of County vehicles and equipment. The Department's main garage in San Bernardino includes four shops: Automotive, heavy duty, welding/metal fabrication, generator services, as well as a parts room, fueling station, and car wash.

The Department operates five service centers: Victorville, Barstow, Needles, Rancho Cucamonga, 29 Palms, and 60 strategically located fuel sites throughout the County, including the recent completion of the Baker fueling station. Additionally, the Department operates a motor pool that has ownership and/or maintenance and replacement responsibility for approximately 2,100 vehicles or equipment assigned to or used by County departments. The Department provides Department of Motor Vehicles title registration and license plate services for all County vehicles.

Information Systems

The Department has several information systems currently in use for their daily operations. They aid the Department in managing fuel inventory, monitoring asset performance, and managing vendors. The Department's primary information system, Faster, is comprised of three modules: Faster Web, Faster Technical Workstation, and Faster Motor Pool. Together, they provide comprehensive fleet asset management from initial acquisition planning through disposal. Additionally, they are used for reporting, business intelligence, parts inventory and processing, vehicle maintenance, accounting, and billing.

Scope and Objective

Our audit examined Fleet Management Department's Information Systems Security Controls as of the date of fieldwork, December 16, 2021.

The objective of our audit was to determine whether security controls over identity and access management in the Department's information systems were in place and effective.

Methodology

In achieving the audit objective, the following audit procedures were performed, including but not limited to:

- Review of the Department policies and procedures
- Interviews of Department staff
- Walk-throughs of Department information systems
- Review of pertinent documents related to information systems
- Examination of password change reports, active user reports, and other system generated reports

Finding 1: Passwords were not changed periodically.

The San Bernardino County Policy Manual Section 09-06 Computer System Data Security states that passwords will be periodically changed by the users in accordance with procedures established by the Office of Management Services.

The following conditions were identified during our testing:
- There were 19 out of 123 employees who had not changed their password in Faster Web within the last year.
- There were 18 out of 28 employees who had not changed their password in Faster Motor Pool within the last year.

The Department did not have a policy or procedure requiring passwords to be changed periodically. When policies and procedures are not established, the risk of unauthorized personnel gaining access to the Department's information systems and making unauthorized changes increases.

Recommendation:

We recommend the Department develop, implement, and communicate procedures regarding password strength and change frequency requirements. Additionally, we recommend that passwords be periodically changed according to the established Department procedures.

Management's Response:

The Department acknowledges the findings of the audit and is encouraged and committed to improving the changing of IT passwords. The Department agrees with the findings, and to improve the strength of passwords and the frequency of password changing. The Department will implement the following:
- The Department will draft and implement a department-wide password procedure that is consistent with County Policy Section 09-06 for password strength and frequency changes. The Department policy will be more specific to the systems of Fleet Management as well as County systems.
- The Department will communicate and train staff to follow the new password policy as stated above.
- The Department will establish an Active Directory connection to Faster, the Department's fleet management information system. Connecting Faster to the current County Active Directory will allow access based on current County credentials and subject to current County password difficulty and password change frequency.

- The Department will make annual documented reviews of department user password changes (not the actual passwords, limited to a review of when passwords were changed) and ensure the passwords are updated pursuant to the new policy.

Auditor's Response:

The Department's planned actions will correct the deficiencies identified in the finding.

Finding 2: Access to information systems was not removed when employees terminated County employment.

The San Bernardino County Policy Manual Section 09-06SP County Central Computer System Data Security states that County assets in the form of computer data must be protected from unauthorized disclosure, modification, and destruction. The County Central Computer system must be secure from outside intruders, and County employee access must be restricted to authorized limits.

The following conditions were identified during our testing:
- There were 2 out of 123 active accounts in Faster Web for which access was not removed when employees were terminated.
- There were 7 out of 28 active accounts in Faster Motor Pool for which access was not removed when employees were terminated.

The Department does not regularly review and compare active accounts to terminated employee listings. When terminated employees have active accounts in the Department's information systems, the risk of unauthorized changes in the systems is increased.

Recommendation:

We recommend the Department develop, implement, and communicate procedures to perform documented reviews of active user accounts and compare them to terminated employee listings. Additionally, we recommend the Department periodically review active user accounts and compare them to terminated employee listings according to the established Department procedures.

Management's Response:

The Department acknowledges the findings of the audit and is encouraged and committed to improving the removal of IT access by users who have left the Department. The Department agrees with the findings, and to improve deletion of access for terminated users. The Department will implement the following:

- The Department will draft and implement a procedure that reviews active user accounts across all Department specific and County IT systems on a quarterly basis.
  The Department will cross-reference and compare the active user list with a terminated users list.
- The Department has updated the Department's existing IT review request form to reflect an On Board and Off Board process form; wherein, access granted dates and removal dates from various systems have documented reviews.
- The Department will maintain a documented review of the terminated user removal as part of the on/off-boarding process of employees.

Auditor's Response:

The Department's actions and planned actions will correct the deficiencies identified in the finding.