



Internal Audit Report

Lee County
Environmental Laboratory



Audit Number: 2014.02

Date: January 13, 2015

January 13, 2015

The Honorable Linda Doggett, Lee County Clerk of Court

Re: Audit of the Lee County Environmental Laboratory

Dear Ms. Doggett:

The Internal Audit/Inspector General Department has conducted an audit of the Lee County Environmental Laboratory. Mike Johnson, CIA, and Mabel Febles completed this review.

The response to the auditor's conclusions, issues, and recommendations are attached to this report. We would like to thank management and staff of the Lee County Environmental Laboratory and appropriate parties for their time, information, and cooperation during the audit process.

This report will be posted to the Clerk of Courts website www.leeclerk.org under Internal Audit/Inspector General Department, Audit Reports. The [hyperlink](#) to the report has been sent to management of the Lee County Environmental Laboratory and appropriate parties.

Should you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Tim Parks". The signature is written in a cursive style with a long, sweeping underline that extends to the left.

Tim Parks, Chief Internal Audit Officer/Inspector General
Internal Audit/Inspector General Department

TJP/mj

Audit of Lee County Environmental Laboratory

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Audit of Lee County Environmental Laboratory

Executive Summary

The audit of the Lee County Natural Resources Environmental Laboratory identified positive service elements of their operations including:

- Operating within authorized budget levels
- Sustaining compliance with regulations and standards
- Achieving operational efficiencies
- Maintaining a cost effective program

The issues that require action to improve operational performance include:

- Operational disruptions due to lengthy Lab Tech vacancies
- Inaccurate and incomplete position descriptions
- Neglected Employee Performance Evaluations
- Ethics policy training
- Employee safety issues
- Building surveillance and security

Introduction

The Internal Audit/Inspector General Department conducted an audit of the Lee County Environmental Laboratory (Lab). The scope of the audit is outlined in the Profile Section.

Audit work paper files contain details supporting the findings, conclusions, and recommendations in this report.

Profile

Background

The Lab was established in 1973. It provides analytical support for Lee County Government and its citizens by providing environmental and compliance monitoring of the waters in Lee County. Samples are collected and analyzed for chemical and biological constituents.

The Lab is certified by the Florida Department of Health which is the recognized accrediting authority for the State of Florida. The Lab must comply with regulations set forth and published by various Federal, State, and regional agencies to maintain its certifications.

Audit Objective

The audit objective is to evaluate risks to the governance, operations, and information systems, and to determine the adequacy of existing controls to ensure:

- Achievement of the organization's strategic and functional goals and objectives
- Reliability and integrity of financial and operational information
- Effectiveness and efficiency of operations and programs
- Resources are used economically and efficiently
- Safeguarding of assets and personnel
- Compliance with laws, regulations, policies, procedures, and certification standards.

Audit Scope

The audit scope includes observations and findings related to:

- Prior audit recommendations
- Mission and Goals/Objective Statements
- Organization Chart/Employee Listings
- Regulatory and Standards Compliance
- Ethics
- Fiscal Management and Administration
- Staff operational concerns
- Adequacy of available resources
- Position descriptions
- Performance Evaluations
- Operational efficiency initiatives
- Building security
- Employee safety

Methodology

Preliminary meetings were held with Natural Resources and Environmental Laboratory management and staff to discuss the audit objectives, scope, and prior audit report findings.

During the field work stage, we met with management and staff during the audit process to discuss and verify preliminary observations and findings. Managers and employees were interviewed for insight on the operations. Evaluations and testing were conducted on operations and procedures for regulatory and standards compliance; the accuracy and completeness of the Fiscal Management and Administration procedures, reports, and controls; and the adequacy of available resources. Other evaluations included the employees' understanding of the Ethics Policy, the accuracy of the position descriptions,

and the employee appraisal process. We also examined the deployed operational efficiency initiatives, assessed employee safety concerns, and attended live sample collections and tests.

During the wrap up stage, an Exit Conference was held with management to discuss and obtain their responses to the audit findings.

Issues

Recurring Operations Disruptions Due To Lab Technician (LT) Vacancies

There are performance disruptions that occur when there are vacant Lab Technician positions.

- The performance disruptions due to LT position vacancies have been lengthy on a number of occasions (See Exhibit 1).
 - The intervals for 21 of 23 of these vacancies since 2000 have ranged from 41 to 475 days.
 - There were five occasions where two LT positions were vacant during the same periods for 5, 8, 20, 25, and 56 days.
- There are four LT positions responsible for a broad scope of sample collections necessary to the water quality monitoring program and the Utilities permitting requirements.
- The LT position is the lowest paid job requiring a college degree in the Lee County Pay Plan.
- One reason LTs are leaving their positions is that a better wage for their experience and college education is available at other testing organizations.
- The performance disruptions cause untimely sample data, misleading Labworks sampling event and test data, delayed folder information, and chain of custody errors.
- We discussed this issue with the Lab management and Lee County Human Resources (LCHR). Proposals were offered, but none were agreed upon to mitigate the occurrences of LT vacancies.
- See Exhibit 2- Analyst's Performance Disruptions for the effects of the vacancies.

Recommendation:

We recommend the continued collaboration with Human Resources to mitigate future LT position vacancies and the resulting performance disruptions.

Inaccurate and Incomplete Position Descriptions

We evaluated the accuracy of employee position descriptions and discovered omissions and inaccuracies including:

- Supervisory duties were being performed and are not included in the job description.
- Lab Techs were observed routinely lifting ice chests weighing over their Maximum Lifting/Carrying requirement of 50 lbs.
- Analyst tests listed were not being performed.
- Current position descriptions have not been reviewed and signed by staff.
- The Fiscal Manager requested position descriptions to be updated, signed, and returned for submission to Lee County Human Resources.
- The descriptions were not completed and returned as requested.

Recommendation:

We recommend that employee position descriptions be reviewed, updated, signed, and returned to LCHR.

Employee Performance Evaluations

We reviewed performance evaluation processes and activities and determined that they do not comply with Lee County Human Resources Policy Number 502 - Performance Evaluations.

- The policy requires supervisors to complete an employee performance evaluation upon the following occasions:
 - By the end of the first three months of employment
 - By the end of the first six months of employment
 - Annually
 - At any other time deemed appropriate to recognize improved or deteriorated performance
- Performance evaluations were not completed for the Chemist and Biologist as specified.

Recommendation:

We recommend compliance with LCHR Policy Number 502 to complete performance evaluations as specified.

Periodic Ethics Training

Lab employees haven't had any Lee County Board of County Commissioners Code of Ethics review or training since their hiring date.

- The Lab Quality Manual requires employee ethics training: "As county employees, all lab personnel are committed to abide by a stringent code of ethics promulgated by the Human Resources Department of Lee County."
- Lab employees demonstrated a limited knowledge and understanding of the stringent code of ethics they are committed to abide by.

Recommendation:

We recommend that employees be periodically provided with the necessary training to ensure that they understand the Code of Ethics.

Employee Safety Issues

The Board of County Commissioners Administrative Code AC 7-4, Lee County Risk Plan provides a comprehensive risk plan to ensure a safe and healthy working environment to safeguard employees, equipment, property, and assets. This plan encompasses both financial and operational risk management practices essential to minimize legal liabilities and personal injuries.

Safety Issue #1- Employees not using provided hazard protection equipment

Staff does not always comply with AC 7-4 that requires the mandatory usage of provided safety and protective equipment when performing hazardous tasks.

We observed:

- The Analyst was not wearing a provided lab coat while working with chemicals that are caustic enough to produce holes in their clothing.
- The Analyst was not wearing provided heat resistant gloves while using an oven warm enough to cause injury.

Recommendation:

We recommend that employees use the provided safety and protective equipment to protect themselves when performing hazardous tasks.

Safety Issue #2- No Active Departmental Safety Coordinator

AC-7-4 requires an employee (preferably a supervisor or higher level) be designated as the department's point of contact for Risk Management issues.

- The designated employee assists the department with formulation and implementation of safety policies and programs and represents the department at Safety Coordinator meetings.
- One employee was identified by the County's Risk Manager as the designated Natural Resources Department Safety Coordinator.
- The designee was not aware of this assignment.

Recommendation:

We recommend that an employee be formally designated as the Safety Coordinator to assist with the formulation and implementation of safety policies and programs.

Safety Issue #3- LabTech's (LT) safety risks

We attended and observed seven Pre-sunrise (4:20AM- 6:37 AM) LT Sample Collections.

- An unaccompanied LT drives to various prescribed locations to collect water samples.
- The unlit (dark) conditions and/or seclusion of several of the sample collection location surroundings may allow for potential safety risks.
- The risks could include assault, animal bites, falls, etc.
- The Lab Tech did not carry a communication device to the collection locations.

Recommendation:

We recommend an assessment of the risks to the Field Tech's safety be made, and determine procedures to manage potential risks.

Recommended Lab Building Surveillance and Security System Not Installed

We followed-up on the physical security controls issue and recommendation included in the prior Environmental Labs Final Report as of September 22, 2009:

- "No physical security controls were present other than standard door locks. We were advised that the Lab has been violated 3 times in the past, as recent as July 9, 2009. As per the Lab's Manager, all incidents were reported to the Lee County Sheriff."
- Various security systems were reviewed in response to the recommendation and were found to be cost prohibitive at that time.
- The Lab entrance is protected with penetrable plate glass and is only partially visible from the street.
- We reviewed some current surveillance and security systems that are available. The newer technologies may provide for a more economical solution.

Recommendation:

We recommend that building surveillance and security systems be researched and installed to protect employees and property.

Exhibit 1

LT Vacancy Intervals

We determined the length of these performance disruptions due to LT position vacancies have been lengthy as the intervals of 21 of 23 of these vacancies since 2000 have ranged from 41 to 475 days. There were 5 occasions where 2 LT positions were vacant during the same periods of 5, 8, 20, 25, and 56 days. These intervals are displayed on the following chart:

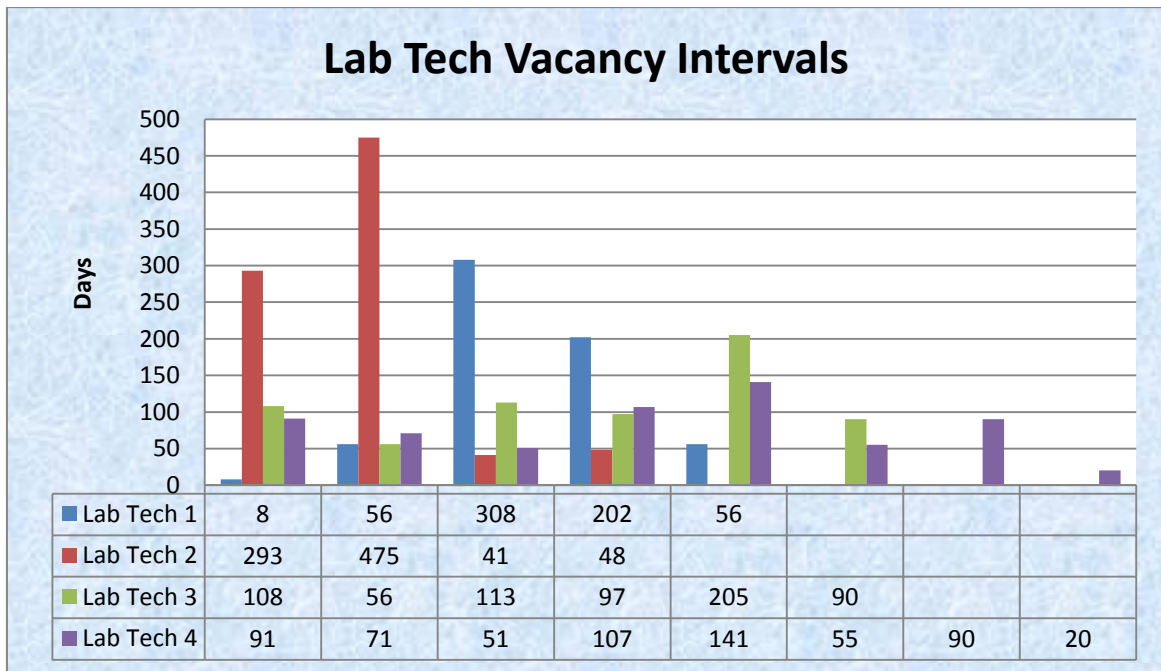


Exhibit 2

Analyst's Performance Disruptions

We verified analyst's performance disruptions listed below due to when LT vacant positions including the absence of timely sample data, misleading Labworks sampling event and test data, delayed folder information, and chain of custody errors.

Issue	Consequence
Field data not uploaded	Color, BOD ¹ , and TDS ² cannot be processed: Field PH ³ is used to evaluate the color results and therefore cannot be reported until the data is in the system. Field DO ⁴ is used to determine if the sample needs to be aerated or not before processing for BOD. Field Conductivity is used to determine the amount of sample that is going to be filtered for the TDS analysis.
Sample not pre-logged	Using the pre- log they prepare their worksheets, bottle, plates and all the supplies they need to process the samples in a timely manner. This is especially critical for samples that have a short hold time.
Updating information in Labworks for samples logged in but not collected	When the samples are not collected due to dry site, a problem, and/or changes in the sampling event and the test are not taken out of Labworks, it affects the work flow of the analyst. The sample gets batched and added to a particular run. The analyst goes to the incubator to get the samples for that particular run, after looking for the sample and asking other analyst if they have the sample, they discover it was never sampled. They have to proceed to delete the sample from the batch, reorganize, and redo their worksheets.

¹ BOD – Biochemical oxygen demand

² TDS – Total dissolved solids

³ pH – Measure of acidity or basicity

⁴ DO – Dissolved Oxygen

<p>Folder verification not done in a timely manner</p>	<p>The folders are not verified that samples are logged in with analysis they do not need or a missing analysis they do need. The analyst will run a test that was not necessary. Also, the analysis that was left off has a short hold time and the sample has to be re-sampled. The whole set of test have to be redone on the new sample. The sample has to be rushed because the customer needs the results in a shorter time frame and the analyst has to do additional runs.</p>
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MEMORANDUM

FROM

THE DIVISION OF NATURAL RESOURCES

Date: January 12, 2015

To: Tim Parks, Chief Internal Audit Officer
Clerk of the Circuit Court Internal Audit

From: Roland Ottolini, P.E.
Director

SUBJECT: Audit of the Lee County Environmental Lab

We would like to thank you for review of the Lee County Environmental Lab. We appreciate the time and effort expended by Michael Johnson in his audit of lab operations. The issues are addressed below:

Operational Disruptions Due to Lengthy Lab Technician Vacancies

We concur with the audit findings. Our frustration with the situation is well documented and we have requested the position be included in County salary surveys and have met with staff of Human Resources regarding our concerns for the turnover rate and disruption to lab operations, discussing both upgrade of the position or modification of the qualifications. Past budget constraints have exacerbated the situation. We recently used a temporary service to fill in when two (2) Lab Technicians were out on FMLA. The position is being studied as part of the current salary survey being undertaken by Human Resources.

Inaccurate and Incomplete Position Descriptions

Staff and supervisors will review position descriptions, correct discussed deficiencies and provide to Human Resources no later than January 31, 2015.

Neglected Employee Performance Evaluations

All performance evaluations will be complete by January 31, 2015.

Periodic Ethics Policy Training

The auditor found reference in the Lab Quality Manual to ethics training promulgated by the Lee County Policies and Procedures Manual. The reference has been removed from the Lab Quality Manual. Policy Number 206, Code of Ethics, and Part III of Chapter 112 of the Florida Statutes are scripted fairly clearly. Ethical cultures are critical to governmental transparency and success. Maintaining National Environmental Laboratory Accreditation Conference (NELAC) accreditation involves the highest level of data integrity which is regularly reviewed by Laboratory staff during the course of business and/or at staff meetings.

Employee Safety Issues

We recognize risk is an inherent part of many position responsibilities. Accordingly, management wishes to minimize work place hazards when presented. Specific issues are delineated below:

- continued -

Safety Issue #1 – Employees not using provided hazard protection equipment.

Use of protective equipment is mandatory and will be monitored by supervisory staff. Non-compliance will be noted as a verbal warning with continued non-compliance reflected in writing and may be included in the evaluation process.

Safety Issue #2 – No Active Department Safety Coordinator

A safety coordinator for the division has been designated (Sam Lee) and Risk Management has been advised.

Safety Issue #3 – Lab Technician’s Safety Risks

The division will utilize the services of Lee County Utilities’ safety staff to review current lab activities with the purpose of identifying potential hazardous conditions and ways to mitigate same. We wish to specifically review lighting and communication scenarios for sample collection procedures.

Building Surveillance and Security

Building security was noted in the 2009 audit based on previous facility break-ins. No further criminal activity has occurred and security system installation at that time was cost prohibitive. During the current audit, comments by staff indicated security for staff members working alone during weekend and holidays should be reviewed. We will review various available technologies and implement a cost/benefit system to determine viability.

Thank you for the opportunity to review and discuss the audit findings. We appreciate the enhanced exit interview process and look forward to its continued implementation.