



# CITY OF TAMPA

Bob Buckhorn, Mayor

Internal Audit Department

Christine Glover, Internal Audit Director

February 27, 2016

Honorable Bob Buckhorn  
Mayor, City of Tampa  
1 City Hall Plaza  
Tampa, Florida

RE: 16-04 Water Production, Audit 16-04

Dear Mayor Buckhorn:

Attached is the Internal Audit Department's report on 16-04 Water Production.

We thank the management and staff of Water Production for their cooperation and assistance during this audit.

Sincerely,

/s/ Christine Glover

Christine Glover  
Internal Audit Director

cc: Dennis Rogero, Chief of Staff  
Sonya Little, Chief Financial Officer  
Brad Baird, Administrator of Public Works and Utility Services  
Chuck Weber, Director of Water Department

**WATER DEPARTMENT  
WATER PRODUCTION DIVISION  
AUDIT 16-04  
FEBRUARY 27, 2016**

**WATER DEPARTMENT  
WATER PRODUCTION DIVISION  
AUDIT 16-04  
FEBRUARY 27, 2016**

/s/ Vivian Walker

---

Vivian Walker, Auditor

/s/ Christine Glover

---

Christine Glover, Audit Director

**WATER DEPARTMENT  
WATER PRODUCTION DIVISION  
AUDIT 16-04**

**BACKGROUND**

The David L. Tippin Water Treatment Facility (DLTWTF) produces up to 120 million gallons of drinking water daily. This facilitates a service population of approximately 650,000. DLTWTF is operational 24 hours per day, 7 days per week, 365 days per year. The facility is capable of storing up to 1 billion gallons in the Aquifer Storage and Recovery System, when excess water is available.

The “production” of water is the result of treating water from the Hillsborough River into drinkable water. The organic by-product of this process is dewatered and returned for processing. Additionally, the organic by-product is dried and used in the fertilizer industry.

DLTWTF is required to comply with regulatory agencies for drinking water quality at the both the state and federal levels.

There are four sections at DLTWTF, with an authorized staff of 90.

**STATEMENT OF OBJECTIVES**

This audit was conducted in accordance with the Internal Audit Department's FY2016 Audit Agenda. The activities of the Water Production Division were reviewed during the planning stage of this audit to identify how regulations were being met. Based on that review, (see Statement of Methodology below) the audit was concluded and additional testing was not considered necessary.

**STATEMENT OF SCOPE**

DLTWTF current activities were reviewed for efficiency and effectiveness for compliance with various regulatory agencies requirements. Original records as well as copies were used as evidence and verified through observation and physical examination.

**STATEMENT OF METHODOLOGY**

The field quality process was observed to determine if chain of custody from water sample collection to laboratory receipt was effective and adequate. Additionally, the Operations monitoring process was observed to evaluate the process for equipment operation as well as alerts received for chemical levels. The overall process used for preventive / predictive maintenance of the equipment was discussed and system records reviewed.

A walk-thru and review of the method used to ensure timely submittal of various regulatory reports related to water quality by both the laboratory and Operations was performed.

The DLTWTF facility uses three different types of software: SCADA – Supervisory Control and Data Acquisition; CMMS – Computerized Maintenance Management System; and LIMS – Laboratory Information Management System. CMMS is used for recordkeeping maintenance completed. SCADA controls the equipment used in the production of water from a central location -. The reporting software for SCADA is known as Historian. The laboratory, which is on-site and accredited, uses LIMS to capture testing results.

#### **STATEMENT OF AUDITING STANDARDS**

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.

#### **NOTEWORTHY ACCOMPLISHMENTS**

DLTWTF Management should be commended for their continuous quality assurance activities. The most recent activity completed was for the sludge process flow.

#### **AUDIT CONCLUSIONS**

Based upon the work performed, we conclude that DLTWTF has adequate processes in place to both comply and timely report compliance with both state and federal regulations.