

**ADVANCED WASTEWATER  
TREATMENT PLANT OPERATIONS  
AUDIT 20-03  
February 27, 2020**



# CITY OF TAMPA

Jane Castor, Mayor

Internal Audit Department

Christine Glover, Internal Audit Director

February 27, 2020

Honorable Jane Castor  
Mayor, City of Tampa  
1 City Hall Plaza  
Tampa, Florida

RE: Advanced Wastewater Treatment Plant Operations, Audit Number 20-03

Dear Mayor Castor:

Attached is the Internal Audit Department's report on Advanced Wastewater Treatment Plant Operations.

We thank the aforementioned management and staff for their cooperation and assistance during this audit.

Sincerely,

/s/ Christine Glover

Christine Glover  
Internal Audit Director

cc: John Bennett, Chief of Staff  
Jean Duncan, Administrator  
Brad Baird, Deputy Administrator  
Dennis Rogero, Chief Financial Officer  
Eric Weiss, Director of Wastewater  
Erik Garwell, Wastewater Treatment Plant Manager  
Jim Johnson, Wastewater Operations Supervisor  
Jon Bemo, Utility Systems Compliance Specialist

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/s/ Anthony D. Tiwari

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Auditor

/s/ Christine Glover

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Audit Director

# **ADVANCED WASTEWATER TREATMENT PLANT OPERATIONS AUDIT 20-03**

## **BACKGROUND**

The Howard F. Curren Advanced Wastewater Treatment Plant is a 24/7, 365 day operation. The vision of the Advanced Wastewater Treatment Plant (AWTP) is to become an efficient world-class utility through the use of improved technology and work practices. The treatment plant is a state-of-the-art facility that treats all wastewater discharged to the City of Tampa's collection system. This collection system extends past the City of Tampa boundaries. The AWTP has a design capacity of 96 million gallons per day, with an average daily flow of 55 million gallons. The final product or effluent water is discharged to Tampa Bay or used as reclaimed water for industrial reuse and irrigation<sup>1</sup>. The AWTP Operations Division (Division) is a dedicated team of individuals tasked with processing and monitoring wastewater, from influent to effluent, in accordance with stringent Federal and State regulatory requirements.

## **STATEMENT OF OBJECTIVES**

This audit was conducted in accordance with the Internal Audit Department's FY20 Audit Agenda. The objectives of the audit were to evaluate:

1. The effectiveness of the Division's internal controls.
2. The Division's compliance with Federal and State regulatory permit requirements.

## **STATEMENT OF SCOPE**

The audit period covered FY19. Both qualitative and quantitative assessments were performed to determine whether the management and staff of the Division were fulfilling their stated duties and responsibilities in an effective and efficient manner. Original records as well as copies were used as evidence and verified through observation and physical examination.

## **STATEMENT OF METHODOLOGY**

We achieved our audit objectives by utilizing the following methods:

1. Reviewed internal policy and procedure manuals to determine whether adequate internal controls are established.
2. Conducted a walkthrough of the plant to understand the processes for treating and monitoring wastewater.
3. Reviewed the regulatory Annual Compliance Inspection Report to determine if the Division addressed recommendations.
4. Performed a data reliability analysis to determine the completeness and accuracy of computer-processed data.
5. Inspected current licenses to determine that Operators were compliant with regulatory requirements.

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<sup>1</sup> Treatment Division. (n.d.). Retrieved from <https://itampa.ads.cot/wastewater/treatment-division>

6. Examined the vehicle inspection process to determine adherence to internal safety controls.
7. Reviewed the current Emergency Response Plan utilized in the event of a disaster.
8. Reviewed the plant's redundancy measures in the event of a power failure.
9. Conducted a walkthrough of the inventory area to understand the process for tracking and securing inventory.
10. Evaluated the procedures for tracking overtime to determine compliance with Human Resource Department's guidelines.

#### **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 conclusions based on our audit objectives.

#### **AUDIT CONCLUSIONS**

Based upon the audit work performed, our conclusions were as follows:

1. The Division's internal controls are effective.
2. The Division complies with Federal and State regulatory permit requirements.