

Performance Audit 25-01: Industrial Sewer Fee Collections

September 2025

City Auditor

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OFFICE OF INTERNAL AUDIT

Stan Sewell, City Auditor

September 2, 2025

To: Mayor Tim Kelly
City Council Members

Subject: Industrial Sewer Fee Collections Audit (Report #25-01)

Dear Mayor Kelly and City Council Members:

The attached report presents the results of our audit of the Industrial Sewer Fee Collection program. While the Moccasin Bend Wastewater Treatment Plant (MBWWTP) has established fundamental controls, we have identified several opportunities for improvement. Our recommendations address these areas by proposing actions to establish policies, manage accounts receivable and review permit fees.

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

Sincerely,

Stan Sewell, CPA, CGFM, CFE
City Auditor

Attachment

cc: Audit Committee Members
Kevin Roig, Chief of Staff
Mande Green, Chief Operating Officer
Steven Wilson, Deputy Chief Operating Officer
Mark Heinzer, Administrator Wastewater Systems
Justin Steinmann, Director Administration Wastewater
Jim Arnette, Tennessee Local Government Audit

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AUDIT PURPOSE

This audit was conducted in accordance with the Office of Internal Audit's 2025 Audit Agenda. The objectives of this audit were to determine whether:

1. Industrial sewer fees are billed and collected accurately, and
2. The collection process for delinquent accounts is effective and sufficient.

BACKGROUND

The Moccasin Bend Wastewater Treatment Plant (MBWWTP), located in Chattanooga, Tennessee, is an essential part of the region's environmental management and public health infrastructure. Established to meet the needs of a growing urban population, the facility treats wastewater, protects local waterways, and ensures compliance with federal and state environmental regulations.

The City of Chattanooga manages the MBWWTP through a Wastewater Fund, which operates as an Enterprise Fund. This means the fund is financially self-sufficient, with its revenues primarily generated from user fees paid by residential, commercial, industrial, and regional customers. Additional revenue sources include surcharges and various fees, such as those for permits, truck and septic tank discharges, service connections, and garbage grinder usage.

For most industrial customers, sewer charges are based on metered water usage. Other industrial facilities submit self-monitoring reports detailing their water usage and wastewater discharge volumes. Surcharges and other fees are also applied to these customers to cover the additional cost of treating wastewater with higher pollutant concentrations. This audit will focus only on revenue from these industrial customers.



Statistics

The MBWWTP primary revenue streams are as follows:

Wastewater Fund				
	<u>Sewer Service Charges¹</u>	<u>Industrial Surcharges</u>	<u>Industrial Permits</u>	<u>Industrial Fines</u>
Fiscal 2020	\$ 79,118,324	\$ 3,224,985	\$ 40,000	\$ 5,263
Fiscal 2021	\$ 79,983,081	\$ 2,577,844	\$ 37,500	\$ 113,768
Fiscal 2022	\$ 87,036,401	\$ 2,132,432	\$ 31,000	\$ 7,900
Fiscal 2023	\$ 94,435,836	\$ 3,055,167	\$ 49,648	\$ 6,581
Fiscal 2024	\$ 99,290,503	\$ 2,533,718	\$ 39,500	\$ 8,900
Source: Fiscal Year Operations Budget - Actual				
Note ¹ : Residential, Commercial & Industrial				

FINDINGS AND RECOMMENDATIONS

Establish Policies.

The Moccasin Bend Wastewater Treatment Plant (MBWWTP) does not have formal written policies for its standard and direct industrial sewer billing processes. While standard industrial billing is handled by a third-party company, ENCO Utility Services, the direct industrial billing is managed by MBWWTP staff.

- Standard sewer charges are calculated using metered water volume.
- Direct sewer charges are based on self-reported discharge volumes.

The existing billing process is informal and relies heavily on the institutional knowledge of current staff.

The lack of formal policies creates an elevated risk of:

- Inconsistent application of procedures by employees.
- Operational disruption in the event of staff turnover.

The Government Finance Officers Association (GFOA) Best Practice advises that organizations establish clear policies for billing, accounts receivable, and write-offs. This includes creating a timely process for generating bills and collecting payments.

Recommendation 1:

We recommend that the Moccasin Bend Wastewater Treatment Plant develop comprehensive written policies for its billing processes. These policies should include specific guidelines for establishing accounts receivable and a clear framework for handling delinquent accounts.

Auditee Response: *We concur with the audit finding and recommendation.*

Estimated Implementation Date: *December 31, 2025*

Priority Level: *2*

**Manage Accounts Receivable.**

The Moccasin Bend Wastewater Treatment Plant (MBWWTP) has a limited capacity to manage its accounts receivable. Currently, the collection of industrial sewer billings is manually tracked using an Excel spreadsheet. The process for managing these receivables is informal and relies heavily on the institutional knowledge of staff.

This manual process creates a risk that the MBWWTP may not promptly follow up on past-due receivables, which could lead to uncollected payments. This practice falls short of the Government Finance Officers Association (GFOA) Best Practice, which recommends that all accounts receivable be recorded in a way that allows for an aging analysis. This analysis helps governments establish procedures to maximize collections.

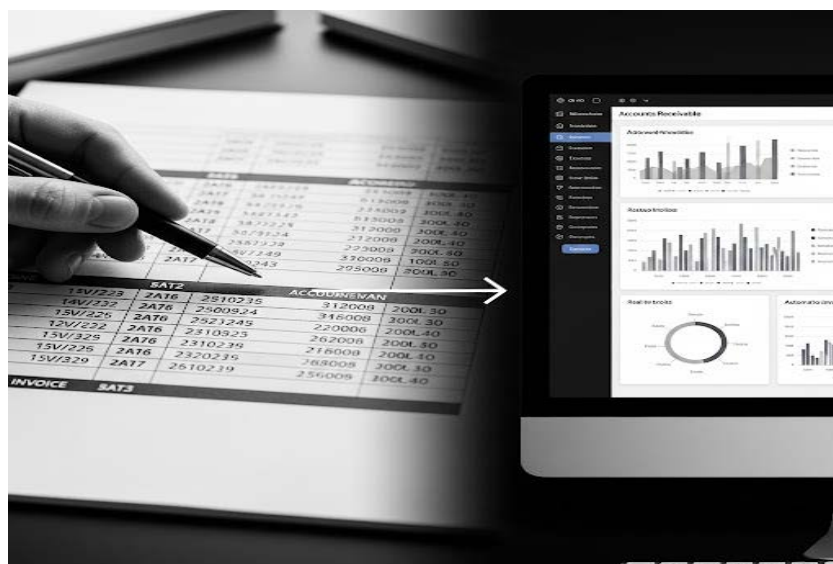
Recommendation 2:

We recommend that the Moccasin Bend Wastewater Treatment Plant (MBWWTP) automate its accounts receivable process. This automation should include a system for handling delinquency notifications to ensure a timely and consistent collection effort.

Auditee Response: We concur with the audit finding and recommendation.

Estimated Implementation Date: February 28, 2026

Priority Level: 2



Review Permit Fees.

The Moccasin Bend Wastewater Treatment Plant (MBWWTP) has a wastewater discharge permit fee of \$500 annually. This fee has not been increased in several years.

According to the Government Finance Officers Association (GFOA), it's a best practice for governments to regularly review and update their fees. The GFOA recommends considering factors like inflation, the cost of service, and the need for cost recovery. By not reviewing the wastewater discharge permit fee, the MBWWTP may be negatively impacting its ability to recover costs.

Recommendation 3:

We recommend that the Moccasin Bend Wastewater Treatment Plant (MBWWTP) conduct a review of its wastewater discharge permit fees. The goal of this review is to assess whether an increase is necessary to ensure adequate cost recovery. Going forward, the plant should conduct a similar review at least every three years.

Auditee Response: *We concur with the audit finding and recommendation.*

Estimated Implementation Date: *December 31, 2025.*

Priority Level: 3



APPENDIX A: SCOPE, METHODOLOGY AND STANDARDS

Based on the work performed during the preliminary survey and the assessment of risk, the audit covers the Industrial Sewer Fee Collections operations from July 2024 to May 2025. When appropriate, the scope was expanded to meet the audit objectives. Original records as well as copies were used as evidence and verified through physical examination.

To accomplish our audit objectives, we reviewed available policies, interviewed staff, documented and evaluated the process, and sampled industrial sewer fees for compliance with established procedures.

The sample size and selection were statistically generated using a desired confidence level of 90 percent, expected error rate of 5 percent, and a desired precision of 5 percent. Statistical sampling was structured in order to infer the conclusions of test work performed on a sample to the population from which it was drawn and to obtain estimates of sampling error involved. When appropriate, judgmental sampling was used to improve the overall efficiency of the audit.

We conducted this performance audit from January 2025 to July 2025 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.

APPENDIX B: PRIORITY LEVEL DEFINITIONS

Priority 1: Critical control weakness exists that exposes the City to a high degree of risk. Noncompliance with federal, state or local law, regulation, statute, charter or ordinance will always be considered a priority 1.

Priority 2: Control weakness exists that exposes the City to a moderate degree of risk.

Priority 3: The opportunity for improved efficiency or reduced exposure to risk exists.

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