REPORT TO THE CITY COUNCIL
BY THE CITY INTERNAL AUDITOR

LIMITED SCOPE PERFORMANCE AUDIT OF WATER AND SEWER SERVICE CHARGES

INTERNAL AUDIT REPORT
(IAR) 600017-06

October 4, 2017

Report Highlights

- Approximately 2,300 water and sewerage accounts were billed the incorrect water and sewerage service charges during 2015 and/or 2016.
- 58 water and sewerage accounts were not billed the monthly $2.50 recycle fee during 2016.

Leanis L. Steward
City Internal Auditor

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October 3, 2017

Councilman James Flurry
Chairman, Shreveport City Council

Dear Councilman Flurry:

Subject: IAR 600017-06 – Limited Scope Performance Audit of Water and Sewer Service Charges

Attached please find the report mentioned above. Management comments are included in the report.

Sincerely,

[Signature]

Leanis L. Steward, CPA, CIA
City Internal Auditor

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EXECUTIVE SUMMARY
LIMITED SCOPE PERFORMANCE AUDIT OF WATER AND SEWER SERVICE CHARGES
INTERNAL AUDIT REPORT (IAR) 600017-06

Why We Did This Audit

We have completed a limited scope performance audit of Water and Sewerage (W&S) Service Charges, the monthly fee billed to customers even if no water or sewerage is used. This audit was conducted as a result of audit fieldwork being performed for the Solid Waste Division, Recycling Services Audit where we identified incorrect water service charges for the recycling contractor. Our objective was to determine if correct water and sewerage service charges and recycle fee were being billed in accordance with City Ordinances 94-164 “Water Charges”, 94-165 “Sewerage Charges”, and 74-31 “Recycled product collection”. We did not review tier or quantity charges for water and sewer billing.

What We Recommended

To improve controls and comply with City ordinances we recommend the W&S Department:

- Ensure water and sewer service charges are adjusted on accounts to comply with ordinances.
- Develop procedures to monitor and ensure that charges are adjusted in accordance with ordinances.
- Bill the recycle fee to all accounts that receive solid waste service.
- Develop procedures to monitor and ensure accounts are billed the recycle fee in accordance with the ordinance.

Limited Scope Performance Audit: Water and Sewer Service Charges

What We Found

City ordinances 94-164 “Water Charges”, 94-165 “Sewerage Charges”, and 74-31 “Recycled product collection” establishes the charges/fees that are to be billed on the water bills.

Our review found there were water and sewer accounts not being billed in accordance with the City ordinances.

We identified the following deficiencies:

- There were approximately 2,300 water and sewer accounts not being billed the correct service charge during 2015 and/or 2016 in accordance with City ordinances 94-164 and 94-165.
- There were 58 water and sewer accounts not being billed the $2.50 recycle fee in accordance with City ordinance 74-31 during 2016 and 2017.
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During our fieldwork on the Solid Waste Division, Recycling Services Audit we found that the recycling contractor was not being billed the correct water and sewerage service charges as required by City ordinances. As a result, we followed up on additional customers and identified other accounts that were not being billed correctly for water and sewerage service charges. In addition, we also reviewed to determine if recycling fees were correctly billed. We did not review any tier or quantity water and sewer charges, which are based on usage.

This report provides the results of our limited scope performance audit of the Water and Sewerage Service Charges to determine if the correct water and sewerage service charges and recycling fee were billed according to the City ordinances.

The objective of this limited scope performance audit is to determine the following:
- If the City is in Compliance with City Ordinances 94-164 “Water Charges” and 94-165 “Sewerage Charges”.
- If the City is in Compliance with City Ordinance 74-31 “Recycled product collection”.
The chart below summarizes the recommendations outlined in the report and our evaluation of risk for the recommendations. We evaluated the importance of each audit recommendation by assigning each a level of risk. The risk levels, as defined in the chart below, were determined based on the possible results for the entity if the recommendation is not implemented. This report contains two findings with four recommendations.

<table>
<thead>
<tr>
<th><strong>Risk Levels</strong></th>
<th><strong>Recommendations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Risk</strong></td>
<td>- Ensure service charges are adjusted on accounts to comply with ordinances. <em>(Finding: Water and Sewerage Charges)</em></td>
</tr>
</tbody>
</table>
| **Medium Risk** | - Develop procedures to monitor and ensure that charges are adjusted in accordance with ordinances. *(Finding: Water and Sewerage Charges)*  
     - Bill the recycle fee to those accounts that receive solid waste service and that are not being charged the recycle fee. *(Finding: Recycle Fee)*  
     - Develop procedures to monitor and ensure accounts are billed the recycle fee in accordance with the ordinance. *(Finding: Recycle Fee)* |
| **Low Risk**    | - None |

Possibility of fraud, waste, and abuse of City assets; Interrupted and/or disrupted operations; Entity’s mission not being met; Adverse publicity.
Scope and Methodology
The scope of this performance audit is limited to the review of the water and sewer service charges and recycle fee to determine compliance with City Ordinances 94-164, 94-165, and 74-31. Periods reviewed were 2015 through April 2017. In order to meet these objectives, we reviewed relevant internal controls and developed audit procedures that included but were not limited to the following:

- Interviewing Departmental management regarding controls
- Reviewing City ordinances
- Reviewing the water and sewer accounts in the water billing system

We conducted this limited scope 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, conclusions, and recommendations based on our audit objectives.

*We thank the personnel in Water and Sewer Department and the Information Technology Department for the cooperation and assistance in gathering information provided to us in our work on this project.*
FINDINGS
AND
RECOMMENDATIONS
Objective: To Determine If City is in Compliance with City Ordinances 94-164 “Water Charges” and 94-165 “Sewerage Charges”.

Water and Sewerage Charges

The water and sewer bill consists of customer service charges and usage charges. The customer service charge will always appear on the bill regardless of how much or little water the customer uses. The service charge helps recover the cost of meter reading and maintaining water distribution and waste water collection systems.

City Code of Ordinances, Chapter 94 “Utilities”, Sections 94-164 (Water Charges) and 94-165 (Sewerage Charges) specifies the monthly rates charged for water and sewer customers.

City Ordinance 94-161 defines the Water and Sewerage Service Charges as follows:

**Water customer charge** is the minimum amount billed monthly to all water accounts based on meter size even if no water is consumed.

**Sewerage service charge** is the minimum amount billed monthly to all sewer accounts regardless of class and regardless of whether or not any sewage is discharged into the sanitary sewerage system.

We found that approximately 2,300 water and sewer accounts were charged the incorrect water and sewer service charges during 2015 and/or 2016. As a result, the City did not comply with the City ordinances and lost an estimated $102,383 of water and sewerage revenue.

<table>
<thead>
<tr>
<th>Service Charge Undercharges</th>
<th>2015</th>
<th>2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total *Estimated Revenue Loss</td>
<td>$89,006</td>
<td>$13,377</td>
<td>$102,383</td>
</tr>
</tbody>
</table>

*Estimated Revenue loss is calculated based on if the accounts were active during the entire year.

Also, overcharges of $2,324 were identified for 2015 and 2016 as shown below.

<table>
<thead>
<tr>
<th>Service Charge Overcharges</th>
<th>2015</th>
<th>2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Overcharged</td>
<td>$872</td>
<td>$1,452</td>
<td>$2,324</td>
</tr>
</tbody>
</table>

The incorrect charges were due to the charges not being changed or were incorrectly entered or programed into enQuesta (water and sewer billing system).
Per the ordinances 94-164 and 94-165, effective October 1, 2013, January 1, 2015, February 1, 2015, and January 1, 2016 the water and sewer charges were as illustrated in the tables below.

### Monthly Sewerage Charge

#### Per Ordinance 94-165 Sewerage Charges

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>5/8</td>
<td>$4.80</td>
<td>$6.54</td>
<td>$7.54</td>
<td>$9.60</td>
<td>$13.08</td>
<td>$15.08</td>
</tr>
<tr>
<td>¾</td>
<td>$5.53</td>
<td>$7.49</td>
<td>$8.64</td>
<td>$11.06</td>
<td>$14.98</td>
<td>$17.28</td>
</tr>
<tr>
<td>1 1/2</td>
<td>$9.98</td>
<td>$14.14</td>
<td>$16.30</td>
<td>$19.96</td>
<td>$28.28</td>
<td>$32.60</td>
</tr>
<tr>
<td>2</td>
<td>$14.06</td>
<td>$19.83</td>
<td>$22.86</td>
<td>$28.12</td>
<td>$39.66</td>
<td>$45.72</td>
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<tr>
<td>3</td>
<td>$29.87</td>
<td>$33.13</td>
<td>$38.20</td>
<td>$59.74</td>
<td>$66.26</td>
<td>$76.40</td>
</tr>
<tr>
<td>4</td>
<td>$51.65</td>
<td>$52.12</td>
<td>$60.09</td>
<td>$103.30</td>
<td>$104.24</td>
<td>$120.18</td>
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<tr>
<td>6</td>
<td>$101.54</td>
<td>$99.59</td>
<td>$114.82</td>
<td>$203.08</td>
<td>$199.18</td>
<td>$229.64</td>
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<tr>
<td>8</td>
<td>$151.69</td>
<td>$156.57</td>
<td>$180.51</td>
<td>$303.38</td>
<td>$313.14</td>
<td>$361.02</td>
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<tr>
<td>10</td>
<td>$205.77</td>
<td>$223.03</td>
<td>$257.13</td>
<td>$411.54</td>
<td>$446.06</td>
<td>$514.26</td>
</tr>
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</table>

### Monthly Water Customer Charge

#### Per Ordinance 94-164 Water Charges

<table>
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**Recommendation 1:** We recommend management ensure service charges are adjusted on accounts to comply with ordinances.

**Management Response:** As can be seen in the Audit’s findings, there has been a reduction in lost revenue from 2015 to 2016. We are committed to ensuring that all of our customers are charged appropriately for the services that we render. The Department is in the process of contracting with an outside consulting firm to complete a compliance examination and audit of the City of Shreveport’s Water and Sewerage department operations, including: commercial customer and household enrollment, customer and household usage, water meter accuracy, accuracy of City personnel when assessing customer water usage (“meter reading”), compliance of outgoing water bills with current local ordinances, accuracy of bills, dissemination of monthly customer bills, payments and collections, and complaint resolution. In the interim, the Department has obtained the services of Systems and Software to fix the incorrect charges found as a result of this audit.

**Due Date:** Less Than 6 Months
Recommendation 2: We recommend management develop procedures to monitor and ensure that charges are adjusted in accordance with ordinances.

Management Response: The consultant for the Compliance and Efficiency Review will be tasked with reviewing all of our procedures and processes as well as creating/updating standard operating procedures for the Customer Service Division. In the interim, we will develop a procedure for testing and quality control for all rate and fee changes made in the system.

Due Date: Less Than 6 Months
Objective: To determine if the City is in Compliance with City Ordinance 74-31 “Recycled product collection”.

Recycle Fee
City Ordinance Sec. 74-31 (h) (j) “Recycled product collection” states: “effective January 1, 2011, there shall be a mandatory $2.50 monthly service fee for recycled product collection for all commercial and residential customers that the city provides solid waste collection. The fee set forth in subsection (h) shall be added to the customer’s water and sewer bill.”

During our review of water and sewer accounts for the year 2016 through April 2017 we found 58 residential accounts located within the city were not being billed the monthly recycle service fee during years 2016 and 2017.

As a result, the City was noncompliant with the ordinance and an estimated $2,320 was not billed. This was caused by the accounts not being set up correctly in enQuesta to bill the recycle fee.

Recommendation 3: We recommend management bill the monthly recycle fee to those accounts receiving solid waste service that are not being charged the recycle fee.

Management Response: The Department understands the importance of creating accurate bills for the services we provide. While this represents less than 0.01% of all residential inside accounts that are required to be billed for recycling, it is nonetheless important that these are correct. We are in the process of adding the recycle fee to the accounts identified in this audit.

Due Date: Less Than 6 Months

Recommendation 4: We recommend management develop procedures to monitor and ensure accounts are billed the monthly recycle fee in accordance with the ordinance.

Management Response: We will develop a procedure to ensure accounts are billed the monthly recycle fee in accordance with the ordinance.

Due Date: Less Than 6 Months
Prepared by:

Tamika Ford
Staff Auditor III

Approved by:

Leanis L. Steward, CPA, CIA
City Internal Auditor

tf:dw
c: City Council
   Clerk of Council
   Mayor
   Director of Finance
   Director of Water and Sewerage
   Chief Administrative Officer
   Carr, Riggs & Ingram