



OFFICE OF THE INSPECTOR GENERAL  
MONTGOMERY COUNTY MARYLAND

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Performance Audit of Solid Waste Activities

Montgomery County Department of Environmental Protection

**OIG Publication # OIG-23-010**

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FEBRUARY 8, 2023

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# EXECUTIVE SUMMARY

This audit of the Department of Environmental Protection (DEP) was initiated pursuant to our mandate to conduct reviews of the internal accounting processes and controls used by each department and principal office in the Executive Branch. DEP's overall operating budget for fiscal years (FY) 2021 and 2022 was approximately \$164 million and \$168 million, respectively. Our audit largely focused on Recycling and Resource Management activities which account for approximately 80% of the overall operating budgets in both FY2021 and FY2022. We examined the extent to which DEP monitors residential collection service contract terms as well as the effect of assumptions used to administer the refuse collection fund. We also assessed controls over the issuance of collector and hauler licenses.

## OBJECTIVES

Through this audit we attempted to (1) determine how the inclusion of the labor peace agreement affected the county's ability to foster competition for residential collection service contracts; (2) analyze the effect of information and assumptions used to administer the refuse collection fund; (3) determine the extent to which DEP monitors residential collection service contract terms for contractor requested price increases, performance bond requirements, and service issues and service requests; and (4) evaluate controls for the processing and approval of collector and hauler licenses.

## SCOPE & STANDARDS

Our audit covered solid waste activity from July 1, 2016, through June 30, 2022, and was conducted in accordance with the generally accepted government auditing standards (GAGAS).

## RESULTS

- The County applied a Consumer Price Index percentage to rate increases that differed from the terms of service contracts.
- Solid waste performance bonds did not include all the county requirements for bonds.
- Due to operating at a deficit, the Solid Waste Collection fund is noncompliant with county code and DEP Fund Balance Policy.
- DEP Hauler-Collector Licensing system user access is not reviewed as required by county policy.
- The hauler and collector licensing process lacks a separation of duties.
- DEP did not properly safeguard Solid Waste Permit decals and failed to maintain related records.

## RECOMMENDATIONS

We made 12 recommendations aimed at improving the effectiveness and efficiency of DEP's solid waste activities and ensuring adherence to county laws and regulations.

We recommend DEP ensure Consumer Price Index terms are updated and performance bond requirements are met within residential collection service contracts. Additionally, we recommend DEP ensure the Refuse Collection Fund is compliant with county code and has a sufficient reserve balance. We further recommend DEP implement separation of duties throughout the collector and hauler licensing process.

Finally, we recommend DEP establish written procedures for complying with AP 6-7's Least Privilege controls, and the safeguarding of permit decals.

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## BACKGROUND

The Department of Environmental Protection (DEP) is tasked with enhancing the “quality of life in our community by protecting and improving Montgomery County’s air, water, and land in a sustainable, innovative, inclusive, and industry-leading way while fostering smart growth, a thriving more sustainable economy and healthy communities.”<sup>1</sup> DEP seeks to achieve this mission through stormwater management, the Tree Montgomery program, residential energy programs, managing the Transfer Station and the Resource Recovery Facility, composting operations, and initiatives to improve recycling and for zero greenhouse gas emissions.<sup>2</sup>

DEP consists of six program areas which fall into two operating budgets: the Environmental Protection budget and the Recycling and Resource Management (RRM) budget. The approved operating budgets, by program, for fiscal years (FY) 2021 and 2022 are shown in table 1 below.

**Table 1: DEP FY21 and FY22 Approved Operating Budgets by Program Area**

Environmental Protection (Program Area)	FY21 Approved Budget	FY22 Approved Budget
Administration	\$1,233,627	\$1,313,828
Energy, Climate and Compliance	\$1,374,904	\$1,222,304
Watershed Restoration	\$30,148,229	\$30,435,842
<b>Total</b>	<b>\$32,756,760</b>	<b>\$32,971,974</b>
Recycling and Resource Management (Program Area)	FY21 Approved Budget	FY22 Approved Budget
Administration and Support	\$6,393,420	\$6,761,152
Disposal	\$67,388,457	\$65,626,411
Materials and Collection	\$57,642,398	\$62,881,960
<b>Total</b>	<b>\$131,424,275</b>	<b>\$135,269,523</b>

This performance audit (audit) focused primarily on the RRM budget which consists of two enterprise funds: the Solid Waste Collection Fund and the Solid Waste Disposal Fund.<sup>3</sup> Of the \$135.3 million FY22 RRM budget, \$124.6 million was allocated to the Solid Waste Disposal Fund and \$10.6 million was allocated to the Solid Waste Collection Fund. The county created these enterprise funds to differentiate between the various costs and revenues applicable to separate elements of the solid waste program.<sup>4</sup> The Solid Waste Disposal Fund is used to administer revenues and expenditures related to the receiving, processing, and shipping of all waste materials, debris, and recyclable materials generated in the county. The Solid Waste Collection Fund is used to manage revenue and expenses related to refuse collection in the county.

The county is divided into two solid waste collection subdistricts, subdistrict A and subdistrict B, that are further divided into thirteen service areas as noted below in figure 1. The county provides

<sup>1</sup> Montgomery County MD Operating Budget, Environmental Protection (<https://apps.montgomerycountymd.gov/BASISOPERATING/>)

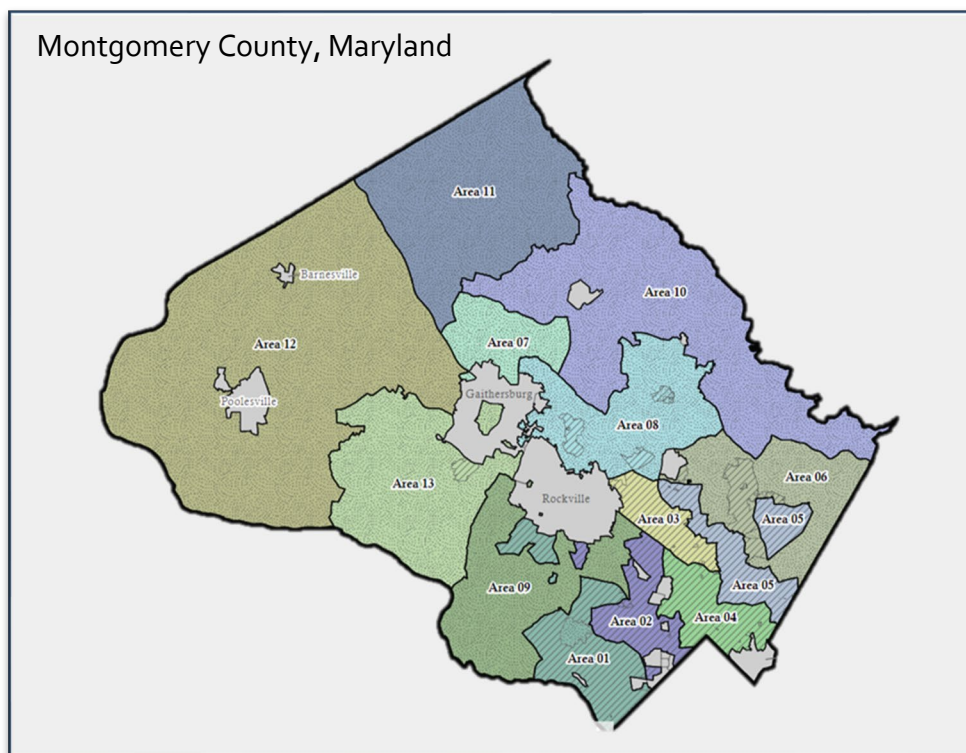
<sup>2</sup> Responsibilities of DEP’s Divisions (<https://www.montgomerycountymd.gov/dep/about.html>)

<sup>3</sup> The Solid Waste Collection fund is interchangeably referred to as the Refuse Collection fund.

<sup>4</sup> Montgomery County Code Sec. 48-43 states that such subsidiary funds as are necessary for segregation of costs and revenues of separable elements of the program must be established in the solid waste fund. Such subsidiary funds must include separate funds for the collection program and for the base and incremental solid waste management services program.

recycling, yard trim, and scrap metal collection services to residential properties<sup>5</sup> in subdistricts A and B. Additionally, for subdistrict A, the county provides refuse and bulk trash services. These services are provided to county residents through competitively procured contracts with private companies, referred to as collection contractors.<sup>6</sup> Refuse and bulk trash collection services are provided to subdistrict B through county-authorized private collectors.

**Figure 1:** Map of Solid Waste Service Areas



In FY22, DEP budgeted approximately \$36.6 million (or 27% of the FY22 RRM budget) for collection contractors. We focused our audit on DEP's monitoring of certain contract terms for residential collection service contracts, the administration of the solid waste collection fund, and the hauler and collector licensing process.

### Labor Peace Agreement

Effective January 24, 2019, county law requires the Director of the Office of Procurement (Procurement) to consider whether to require certain contracts to include a labor peace agreement (LPA) provision. LPAs are written contracts between an employer and a labor organization that includes certain provisions.<sup>7</sup> The Director of Procurement must consider the following when making a determination:

- 1) the duration of the contract;

<sup>5</sup> Residential properties are single- or two-family dwelling units and any multifamily building with 6 or fewer dwelling units.

<sup>6</sup> County Code Sec. 48-1 states, "Collection contractor means a private company under contract with the County to provide solid waste collection services to dwelling units with less than seven units within the Solid Waste Collection Districts."

<sup>7</sup> Montgomery County Code Sec. 11B-90.

## BACKGROUND

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- 2) the adverse financial or economic impact of any disruption in services;
- 3) the cost associated with finding replacement services;
- 4) the risk of disruption of services;
- 5) the history of strikes or lockouts disrupting County services provided by the contract;
- 6) the potential adverse effect of a labor peace provision on competition for the contract; and
- 7) any other factors affecting the public interest.

If the Director of Procurement determines that the LPA provision is in the best interest of the county, they must recommend the inclusion of the LPA to the Chief Administrative Officer (CAO) in writing. If the CAO approves the inclusion of the LPA provision in the contract, the Director of Procurement must include the provision in the solicitation for bids.

On December 15, 2020, DEP published the first solicitations affected by the LPA requirement for service areas 9 through 13. On November 20, 2020, the former director of DEP issued a decision memorandum to the CAO, through the Director of Procurement which made the determination that the inclusion of the LPA requirement would have an adverse effect on competitive pricing and stability of services. Nonetheless, the inclusion of the LPA was recommended on these requests for proposals (RFPs) given that it was the first solicitation since the LPA law took effect. The CAO approved the recommendation to include the LPA requirement in the RFPs for service areas 9 through 13. Through inquiry and review of email correspondence, we learned that three companies declined the opportunity to bid on service areas 9 through 13 due to the LPA requirement for those solicitations. Only one company submitted a bid for service areas 9 through 13 and was subsequently awarded the contract for those service areas.

The second set of solicitations to be published after the LPA requirement took effect were for service areas 6 and 8. On September 23, 2021, the former director of DEP issued a decision memorandum to the CAO through the Director of Procurement. The memorandum stated that given the demonstrated need for competition and the recent experience with the contracts for service areas 9 through 13, DEP and the Director of Procurement recommended that the RFPs for service areas 6 and 8 be issued without the LPA requirement. The county code does not require CAO approval when a recommendation not to include an LPA is provided.

The solicitations for service areas 6 and 8 were issued on January 5, 2022 without the inclusion of the LPA requirement but subsequently cancelled on February 18, 2022 at the direction of the CAO. The CAO's directive cited that the solicitations were being cancelled pursuant to the county's procurement regulations.<sup>8</sup> The CAO also instructed DEP and the Director of Procurement to issue two new solicitations requiring LPAs for service areas 6 and 8. On March 4, 2022, DEP issued two new solicitations that included the LPA requirement, as directed by the CAO. However, the related RFPs were subsequently cancelled on September 26, 2022, at DEP's request.

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<sup>8</sup> Code of Montgomery County Regulations (COMCOR) Section 3.1.4.1 which states that the Director may cancel a solicitation in whole or in part after the opening or due date specified for opening when it is determined that this action is in the best interest of the County.

Our audit sought to determine how the inclusion of the LPA affected the county's ability to foster competition for residential collection service contracts. However, we were limited in the amount of information available to fully assess the effect on competition. Because county law designates responses to RFPs as confidential and restricts access to the public, we were not able to use information from canceled solicitations as the basis for any substantive testing. Additionally, since the LPA requirement took effect, DEP has only issued one solicitation (for service areas 9 through 13) with an LPA requirement that resulted in an awarded contract. Due to these limitations, future reviews of the LPA requirement may be beneficial as more contracts are awarded and additional information becomes available.

### **OIG Audit Approach**

Our audit covered various solid waste related activities during a cumulative period between July 1, 2016, through June 30, 2022, including: all applications for collector and hauler licenses and vehicle registrations processed; all residential refuse, recyclable materials, yard trim, and scrap metal/e-waste collection services contracts and related solicitations and amendments for service areas 1 through 13; Disposal Fund and Refuse Collection Fund general ledger journal entries; and refuse collection charge calculation assumptions and supporting documentation.

Through our audit, we sought to determine how the inclusion of the labor peace agreement affected the county's ability to foster competition for residential collection service contracts and the extent to which DEP monitors residential collection service contract terms for collection contractor-requested price increases, performance bond requirements, and service issues and service requests. We also attempted to analyze the effect of information and assumptions used to administer the refuse collection fund and to evaluate controls for the processing and approval of collector and hauler licenses.

We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS).

Appendix A contains additional information on this audit's objectives, scope, and methodology.



## FINDINGS AND RECOMMENDATIONS

Consistent with our mandate to conduct reviews of the internal accounting and contracting processes and controls used by principal offices in the Executive Branch, we reviewed DEP’s Recycling and Resource Management Division budget and focused our audit on related solid waste activities. Specifically, we reviewed DEP’s monitoring of exclusive residential collection service contracts (residential collection contracts), administration of the Refuse Collection Fund (the Fund), and hauler and collector licensing processes and controls. We made several observations below related to the areas we examined. Our observations present opportunities for DEP to improve operational efficiency and improve processes but did not rise to the level of a finding.

We observed that performance bonds for 8 out of 13 collection service areas do not have sufficient coverage to supplement the county’s financial exposure to unforeseen breaks in residential collection services. The table below displays the current performance bond coverage by collection service area and the total budgeted expenditures for services being performed under existing county contracts.

**Table 2:** *Performance Bond Coverage by Collection Service Area*

Collection Service Area	Residential Collection Contract Commencement Date	Performance Bond Coverage Amount	FY22 Solid Waste Services Budget
1	4/29/2018	\$50,000	\$5,118,033
2	3/4/2018	\$50,000	\$3,432,003
3	6/9/2019	\$50,000	\$3,724,323
4	4/29/2018	\$50,000	\$4,639,078
5	10/27/2018	\$50,000	\$3,300,177
6	6/6/2011	\$50,000	\$1,948,058
7	7/1/2018	\$50,000	\$2,528,484
8	6/6/2011	\$50,000	\$1,914,909

In discussing our observation with DEP, they reported that they will apply the new performance bond coverage requirements to each service area following the expiration of existing contracts.

DEP obtains solid waste collection issues and service requests from residents through the county’s MC311 Customer Service Center and the “AskDEP” inbox. Residents can also submit service requests by directly contacting county personnel. Mc311 acts as the primary tracking system for service issues and requests. We observed that not all service issue complaints and requests are captured in MC311. This limitation could hinder DEP’s ability to provide timely resolutions to service issues and address requests and could lead to errors in reporting on customer service performance measures.

We further observed DEP’s information system (IS) lacks the ability to generate a comprehensive report of all Solid Waste Permit decals issued and that a payment report includes duplicate records



when data is exported. DEP informed us that the reporting functionality of the IS has not been fully developed. Updating this functionality could improve department efficiencies and data reliability concerns.

Lastly, we observed that even though the \$500 performance bond required by Chapter 48 of the County Code was waived by the former DEP director as of January 30, 2021, DEP’s applicant website still includes a notification stating that a performance bond is required for registration. DEP should remove the notification to provide applicants with accurate information and not wrongly discourage would be applicants who may see the performance bond as a barrier.

### Residential Collection Contract Monitoring

**Finding 1: The county is applying a Consumer Price Index percentage that differs from the terms of the executed residential collection service contracts.**

Per the residential collection contract provisions, contractors can request one price adjustment for each year during the term of the contract. The price adjustments are contingent on CPI percentages obtained from the Department of Labor, Bureau of Labor Statistics (BLS) or the percentage change in the contractor’s expenses for a given year.<sup>9</sup> We compared the amount paid to three contractors for requested price adjustments with contract terms and determined that the county utilized a CPI percentage that differed from the terms of executed contracts and amendments resulting in higher-than-expected payments.

CPI percentages can be calculated utilizing several different factors including location, industry, and commodity. In 2 of the 3 contracts we reviewed, the CPI criteria was “...all Urban Consumers (CPI-U) issued for the Washington-Baltimore, DC-MD-VA-WV Metropolitan area...detailed expenditure category...**garbage and trash collection**) [bolded for emphasis]”.<sup>10</sup> The remaining contract utilized the CPI criteria “...all urban consumers issued for the Washington-Baltimore, DC-MD-VA-WV Metropolitan area...for [detailed expenditure category] **ALL ITEMS** [sic].”

We noted that the CPI specific to Washington-Baltimore, DC-MD-VA-WV Metropolitan area was no longer captured by the BLS after 2017. However, the criteria continued to be carried in the residential collection contract amendments issued after 2017. When we looked at how the county calculated contract price adjustments for the most recently issued contract amendments for each of the contractors, we noted they utilized CPI percentages specific to Washington-Arlington-Alexandria, DC-MD-VA-WV Metropolitan area (Washington-Arlington) in one instance and the US City Average for the remaining two. On average the CPI percentage for Washington-Arlington was 0.6% and the US City Average was 3.4%. Based on our analysis, the county paid approximately

<sup>9</sup> For the three contracts we reviewed, Section 6.11 Compensation and Adjustments state, “payment will be adjusted based on the lesser of the percentage change in the Contractor’s approved expenses during the twelve (12) months prior to the Anniversary Date, or the CPI in effect on the contract term Date.”

<sup>10</sup> Exclusive Residential Collection Service Agreements for Service Areas 2 and 3.

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\$113,000 more by using the US City Average rather than consistently applying the Washington-Arlington CPI.

A DEP manager relayed that they were aware some price adjustments were based on the US City Average CPI, which was the higher of the two. The DEP manager explained that they needed to “look out for the best interest of the county, but...also have to look out for the best interest of our contractors”. They stated that the contract amendment terms were different than the applied CPI due to probable clerical errors.

Applying contract conditions that differ from those stipulated in the residential collection contracts could result in unwarranted disparities between contractors. It also could result in the county paying more than anticipated for residential collection services.

### Recommendation 1

#### We recommend DEP

**Ensure exclusive residential collection service contract CPI terms are updated to reflect actual criteria used.**

**Finding 2: Solid waste collection performance bonds do not include all the county’s requirements for bonds.**

Prior to being awarded a new county contract, collection contractors are required to obtain and provide DEP with a performance bond to serve as security in the event the contractor fails to meet their contractual obligations. County procurement regulations outline minimum requirements for performance bonds.<sup>11</sup> Procurement is responsible for reviewing and approving these performance bonds and in doing so, utilize the PMMD-94 - Performance/Labor & Material Bond Checklist (checklist) and procurement regulations to ensure bonds reflect all necessary requirements.

The Code of Montgomery County Regulations (COMCOR) Section 11B.00.01.09.1.3.1(c), (d) and (e) states that all bonds must meet the following requirements:

*"...(c) The obligee of the bond must be "Montgomery County, Maryland", or any additional or other obligee required by the County. (d) Any surety or insurance company that issues a bond in favor of the County consents to personal jurisdiction in the State of Maryland and, in the event that any legal action is filed upon the bond, venue shall lie exclusively in the Circuit Court for Montgomery County, Maryland. (e) The bond must be governed by, and construed in accordance with, the laws of the State of Maryland."*

We reviewed 13 solid waste collection performance bonds and noted that 2 did not include the provisions required in (c), (d), and (e) above. Specifically, they did not list Montgomery County,

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<sup>11</sup> COMCOR 9.1.3.1

Maryland as a bond obligee, the State of Maryland as the governing body over the bond, and Montgomery County, Maryland as the venue in the event that any legal action is filed. We reviewed the Performance/Labor & Material Bond Checklists (checklist) completed for the 2 noncompliant bonds and found that they were erroneously marked as having been fulfilled. Additionally, the checklist for one noncompliant bond showed that the requirements for provisions (d) and (e) were met even though they were not.

Procurement, who reviews performance bonds, stated that they could not speculate as to the reasons for the issues with the obligee and jurisdiction on the bonds. In relation to the issues with the governing jurisdiction, Procurement maintained that since the bond language didn't restrict jurisdiction to somewhere else, "jurisdiction could be properly had in the [c]ounty". Not including the minimum required provisions of the county's procurement regulations may inhibit the county from addressing issues with contractors that do not meet contract obligations.

## Recommendation 2

### We recommend DEP

**Ensure that all performance bond requirements are met and included in the bond prior to the execution of exclusive residential collection service contracts.**

### Refuse Collection Fund

**Finding 3: The Solid Waste Collection fund has been operating at a deficit since FY18 resulting in noncompliance with the Fund Balance Policy and county code.**

Montgomery County Code Section 48-43 states that the Refuse Collection fund "must be maintained and managed so that revenues equal expenses." The county code allows for the retention of surplus funds over a multiyear period to fund short-term deficits. DEP Fund Balance Policy establishes that between 10 and 15 percent of the fund's assets must be maintained as a reserve to cover the "cost to replace lost service of the solid waste collection district's largest contractor for six months which provides service continuity while simultaneously arranging for the replacement of the contractor". The Fund is supported by refuse collection charges billed annually to county residents. The county code requires that charges be adjusted at least annually to fund deficits.

Contrary to policy, the Fund has operated in a deficit since FY18. In an April 23, 2018, County Council Transportation, Infrastructure, Energy & Environment (T&E) Committee worksession DEP reported the following causes for the deficit:

- Several previous contracts were "probably bid at prices that were unreasonably low".

## FINDINGS AND RECOMMENDATIONS

- There had been increased labor costs - with the more competitive market for drivers with commercial drivers' licenses (CDL), and the increases in the county's mandated minimum wage rates for contractors.
- The previous contracts were awarded as 7-year base term contracts, with two option years. The re-competed contracts were awarded as 5-year base term contracts (with two option years), to address problems with deteriorating performance that was noted in awarding the 7-year base term contracts previously.

In FY18, DEP executed a \$4 million interfund loan from the Disposal Fund to the Refuse Collection Fund in an attempt to address the Fund's sustainability concerns during that year.<sup>12</sup> However, contrary to policy, the Fund has continued operating at a deficit and is not retaining a 10-15 percent reserve. Table 3 below shows the Fund balances by fiscal year.

**Table 3: Refuse Collection Fund Balance Deficit FY17-FY23**

Fiscal Year (FY)	FY17 Actual	FY18 Actual	FY19 Actual	FY20 Actual	FY21 Actual	FY22 Projected	FY23 Projected
Fund Balance Deficit	\$1,534,806	(\$140,203)	(\$1,875,685)	(\$3,054,679)	(\$3,656,462)	(\$3,100,187)	(\$2,774,683)

Increases to the refuse collection charge are recommended by the County Executive and ultimately approved by the County Council during the annual budget process. The County Council must set charges that correspond as closely as practicable to the actual cost of services.<sup>13</sup> Since FY18, refuse collection charges to residents increased slightly, but not enough to overcome the Fund's deficit balance. DEP projected the refuse collection charge to increase at a rate of \$10 per year starting FY22 in an attempt to make the Fund solvent by FY28. Table 4 displays the refuse collection amounts billed to residents.

**Table 4: Refuse Collection Amounts Billed to Residents FY17-FY23**

Fiscal Year (FY)	FY17 Actual	FY18 Actual	FY19 Actual	FY20 Actual	FY21 Actual	FY22 Actual	FY23 Actual
Refuse Collection Charge to Residents	\$70	\$70	\$77	\$95	\$107	\$117	\$127

DEP is aware of the fund balance deficit and has acknowledged that it has not complied with the fund balance policy for many years. DEP management informed us that they are working towards improving the financial health of the Fund moving forward. By ensuring the Fund maintains an

<sup>12</sup> Interfund loan is referred to as "due from/to other funds" in the county's Annual Comprehensive Financial Report (ACFR).

<sup>13</sup> Montgomery County Code Sec. 48-29

adequate reserve, DEP can be better equipped to address unforeseen factors that may negatively impact the fund, including industry challenges and economic fluctuations.

### Recommendation 3

#### We recommend DEP

- a) **Ensure the Refuse Collection Fund is compliant with Section 48-43 of the county code by not operating in a deficit. Consideration should be given to increasing refuse collection charges, the use of a consistent standard for contractor requested price adjustments, and implementation of practices to reduce fund expenditures.**
- b) **Ensure that the Refuse Collection Fund reserve balance is sufficient to cover the cost to replace lost service of its largest contractor for six months to allow for continuity of service.**

### Hauler and Collector Licensing

**Finding 4: DEP Hauler-Collector Licensing information system user access is not reviewed as required by county policy.**

In February 2021, DEP developed the DEP Hauler-Collector Licensing information system<sup>14</sup> (IS), to automate the issuance of licenses to haulers and collectors in the county and to track related revenue transactions.<sup>15</sup> We learned that there are eight reported users of the IS and all are assigned administrator (admin) roles. Admin roles provide users with privileges to edit license applications including changing the license status, add/edit vehicle detail, add/update contact details, add Solid Waste Permit decals, add payment details and initiate payments, and approve or reject license applications. Users with admin roles can also review documents uploaded by applicants, change the license type (hauler or collector), and activate or inactivate licenses.

We learned that the DEP licensing program manager (program manager) is responsible for performing all the functions associated with the admin role. The remaining users have other job responsibilities that outwardly do not appear to require full admin access. Administrative Procedure 6-7 (AP 6-7) requires an annual review of the privileged accounts to validate the need for such privileges, and an audit of privileged IS account functions. Although DEP acknowledged that they are required to follow AP 6-7, we found that DEP did not conduct either assessment and, therefore, users may have privileges assigned beyond required business needs. We also found that

<sup>14</sup> According to AP 6-7, an information system is a “discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information, whether such information is in digital or non-digital form.”

<sup>15</sup> The county’s Accounts Receivable Policies, Financial Governing Principles and Standards, effective April 1, 2020, defines revenue transactions as “any exchange or transfer activity occurring in the...departmental system which can be defined as an Invoice, Miscellaneous Receipt, Invoiced Receipt, or other action which would...require recordation of Revenue...”

## FINDINGS AND RECOMMENDATIONS

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although the IS produces an activity log that shows all the changes made and activity within the IS, the log does not capture the user who made the changes.

The absence of access privilege reviews and audits could result in the misuse of access rights and enable unauthorized changes to collector/hauler applications and licenses, and potential fraud.

### Recommendation 4

#### We recommend DEP

- a) Update the IS activity log to capture the name of the user who performed the activity.
- b) Comply with AP 6-7, Least Privilege controls by conducting annual reviews of privileged accounts to validate the need for such privileges and assigning staff to perform audits of privileged IS account functions.
- c) Establish written procedures for complying with AP 6-7 Least Privilege controls.

**Finding 5: A lack of separation of duties exists in the processing of hauler and collector license applications, and the reconciliation of license fee revenue.**

Montgomery County Code Chapter 48 states that solid waste must not be collected or transported in the county except by a licensed collector<sup>16</sup> or hauler<sup>17</sup>. The county code also provides minimum requirements for the issuance of collector and hauler licenses.<sup>18</sup> As of March 2022, the program manager was responsible for all operational functions related to the IS, including processing and approving hauler/collector applications, issuing Solid Waste Permit decals, reconciliation of fee revenue, and processing license fee refunds.<sup>19</sup>

Note that in figure 2 below, which contains an overview of the hauler/collector licensing process, the program manager is single-handedly responsible for most of the operational functions. We noted that the program manager is responsible for processing and issuing hauler/collector licenses but is also responsible for reconciling the license fee revenue and issuing refunds. This could lead to the improper issuance of licenses, miscalculated license fees, and potential fraud.

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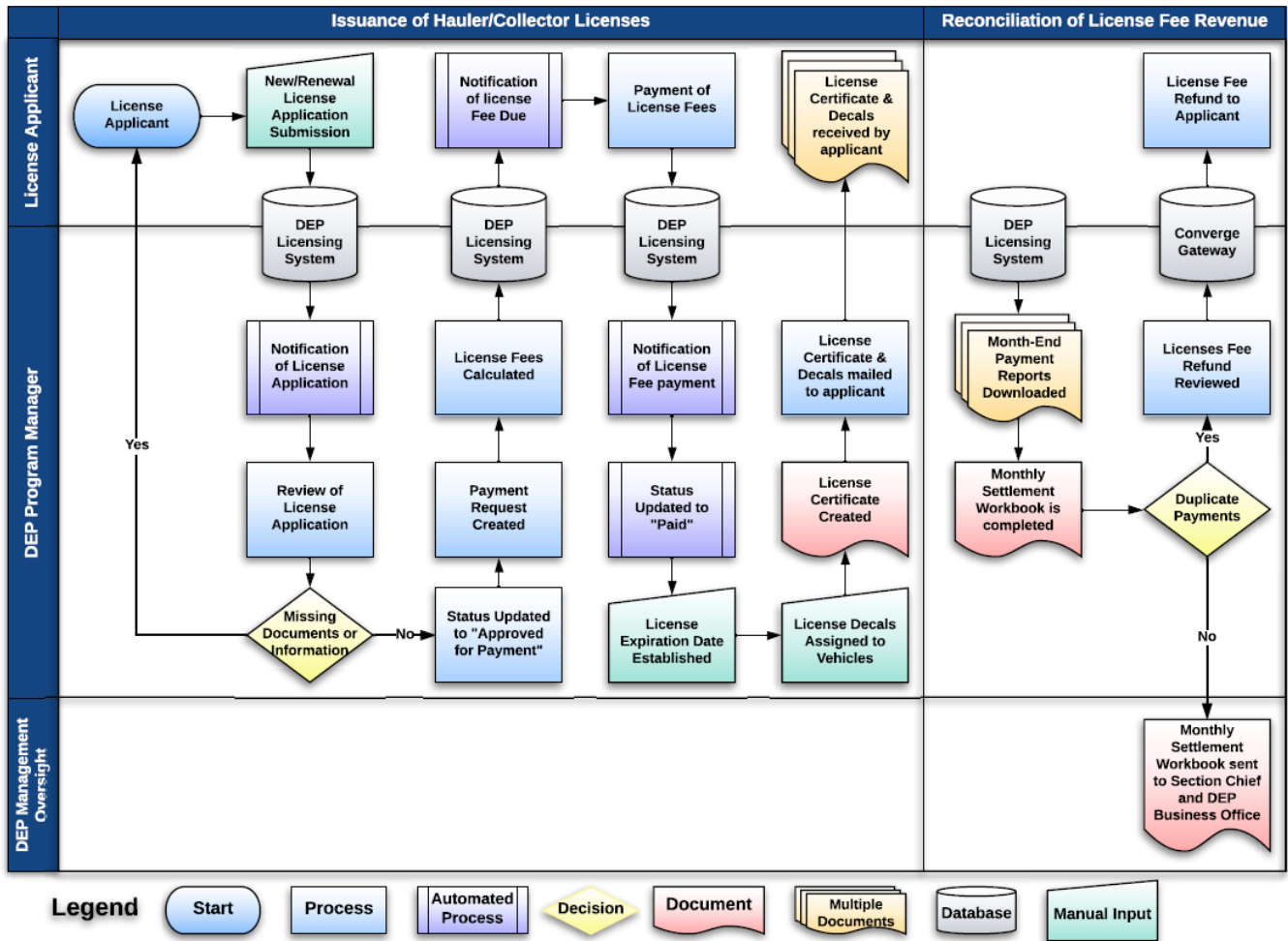
<sup>16</sup> Montgomery County Code Sec. 48-1. Definitions states a “collector means any person who contracts to collect and provide services for collection and/or transporting the solid waste of others to its disposal site.”

<sup>17</sup> Montgomery County Code Sec. 48-1. Definitions states a “hauler means any person operating a commercial business or engaged in any enterprise regularly generating solid waste which requires collecting and hauling to an approved point of disposal, when such collecting and hauling is done by the person generating such material in his own vehicles or in vehicles leased for the purpose, in lieu of having a collector perform this service.”

<sup>18</sup> Montgomery County Code Sec. 48-19

<sup>19</sup> Prior to March 2022, the operational functions were shared by two employees.

Figure 2: Overview of the DEP Hauler-Collector Licensing Process



The county’s Accounts Receivable Policies, Financial Governing Principles and Standards, effective April 1, 2020 (AR Policy) states that departments and offices which engage in revenue activities must ensure appropriate internal controls, including separation of duties, and maintain up-to-date documented policies and procedures. The policies and procedures must describe how all revenue, cash receipts, invoice processing (if applicable), receipt processing, and reconciliation of Accounts Receivable and revenue activities are to be performed and controlled.

During the scope of our audit, DEP had Collector and Hauler Licensing Program standard operating procedure (SOP), however, it did not detail the responsibilities of staff or the performance of operational functions. After our scope period of July 1, 2021, through June 30, 2022, the program manager created a “Hauler and Collector Portion of License System” manual (Manual) that includes instructions for administration of the hauler/collector licensing process. The Manual provides directions for reviewing and approving licenses and assigning Solid Waste Permit decals to collector and hauler vehicles. However, the Manual does not properly define a separation



## FINDINGS AND RECOMMENDATIONS

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of duties that should exist throughout the process or procedures for receiving license fee revenue and performing reconciliations.

In addition to a lack of separation of duties, we also observed through testing that the IS automatically updates license statuses when payments are made but does not automatically update the status of the license when the expiration date is reached. The program manager can manually assign expiration dates to licenses. We also observed that the IS calculates the license and truck fees but users with an admin role can subsequently edit the fees before requesting payment from the applicant. DEP could benefit from improved IS functionality and automated processes to aid in alleviating separation of duties concerns.

### Recommendation 5

#### We recommend DEP

- a) Implement separation of duties throughout the DEP licensing process.
- b) Update DEP Licensing program procedures to comply with AR Policy, to include separation of duties in the processing and approval of hauler and collector licenses, the issuance of Solid Waste Permit decals, and the reconciliation of license fee revenue.

**Finding 6: Records over Solid Waste Permit decals were not maintained to ensure accountability and decals were not properly safeguarded.**

The program manager is responsible for the issuance of Solid Waste Permit decals to licensed haulers and collectors and as such, maintains a supply of unissued decals. However, they did not maintain a comprehensive list of all issued and unissued decals for our scope period of July 1, 2021 through June 30, 2022. Additionally, we observed a stack of decals on a shelf in the program manager's office easily accessible to anyone entering the office. The program manager explained that they normally secure the decals in a locked file cabinet but couldn't explain why the decals were found on the shelf.

Lastly, we observed that there was inconsistent documentation of the date and tracking number for Solid Waste Permit decals mailed to approved licensed collectors or haulers. We noted that DEP does not have written procedures over the safeguarding of decals, to include the disposition of unissued decals after expiration. A lack of accountability over decals may result in the improper issuance of decals, loss of fee revenue, and potential theft.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO)<sup>20</sup>, a recognized source for developing internal control frameworks, generally recommends that management design appropriate types of control activities to achieve their objectives and respond to risks<sup>21</sup>. Specifically, DEP should limit access to resources and records to authorized individuals and maintain records to ensure proper accountability.

At the end of our audit, the program manager provided us with a spreadsheet purporting to be a reconciliation of issued and unissued decals for FY22 through FY24. The spreadsheet appears to have been created subsequent to our discussions with the program manager about maintaining accountability of decals.

### Recommendation 6

#### We recommend DEP

- a) **Maintain an inventory listing of issued and unissued decals and conduct recurring reconciliations to ensure proper accountability.**
- b) **Properly secure unissued decals to limit unauthorized access and maintain accountability.**
- c) **Establish written procedures over the safeguarding of decals, to include the disposition of unissued decals after expiration.**

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<sup>20</sup> The COSO developed an *Internal Control – Integrated Framework* that is widely accepted and utilized in various organizations around the world. The framework is recognized as a “leading framework for designing, implementing and conducting internal control and assessing the effectiveness of internal control.”

<sup>21</sup> The COSO explains that control activities are the policies and procedures that enforce management’s directives to achieve the entity’s objectives and address related risks.

## OIG COMMENTS TO THE CAO'S RESPONSE

The County Chief Administrative Officer's response to our report is included in its entirety in Appendix B. The response notes concurrence with the OIG's twelve recommendations.

We expect specific details related to the County's actions and plans to implement our recommendations to be included in the Internal Auditor's fiscal year 2023 annual report which, in accordance with County Code §2-25A, is due in the fall of 2023.

# APPENDIX A: OBJECTIVES, SCOPE, AND METHODOLOGY

## Objectives

The objectives of this performance audit were to:

- 1) Determine how the inclusion of the labor peace agreement affected the county's ability to foster competition for residential collection service contracts;
- 2) Analyze the effect of information and assumptions used to administer the refuse collection fund;
- 3) Determine the extent to which DEP monitors residential collection service contract terms for contractor requested price increases, performance bond requirements, and service issues and service requests; and
- 4) Evaluate controls for the processing and approval of collector and hauler licenses.

## Scope and Methodology

The scope of our audit covered various subject areas and time periods as outlined below:

- All residential refuse, recyclable materials, yard trim, and scrap metal/e-waste collection services contracts for service areas 1 through 13 in effect between July 1, 2020, and June 30, 2022, including the related amendments and emergency procurements.
- All requests for proposals (RFPs), solicitations and solicitation amendments in effect between July 1, 2020, and June 30, 2022, including the related proposals received, decision memorandums, evaluations, and other relevant documentation.
- Refuse Collection Fund general ledger journal entries and supporting documentation between July 1, 2016, and June 30, 2019
- Refuse collection charge calculation assumptions and supporting documentation for prospective and actual analyses conducted between July 1, 2016, and June 30, 2022.
- All applications for collector and hauler licenses and vehicle registrations processed between July 1, 2021, and June 30, 2022.
- All semi-annual solid waste tonnage reports submitted by collectors and haulers between July 1, 2021 and June 30, 2022.

We conducted our fieldwork from March 2022 to November 2022. To accomplish our objectives, we conducted interviews and made inquiries of DEP personnel within the Recycling and Resource Management Division, Strategic Services Division, and Office of the Deputy Director for the Department of Environmental Protection as well as county staff within Procurement. We conducted walkthroughs to understand the controls over the processing and approval of collector and hauler licenses, determine how contractor requested prices adjustments are reviewed and

approved, and identify the extent to which the county monitors solid waste collection service issues and requests.

We obtained and reviewed the following criteria for our performance audit:

1. Montgomery County Code, Chapter 11B. Contracts and Procurement, Article XX. Labor Peace Agreements;
2. Bill 6-18 – Contracts – Labor Peace Agreements – Displaced Service Workers – Amendments;
3. Montgomery County Code, Chapter 48. Solid Waste (Trash);
4. Code of Montgomery County Regulations (COMCOR), 48.00.04.03 Solid Waste Collection;
5. Master Authorization;
6. Fund Balance Policy Memorandum – Solid Waste Enterprise Fund (Disposal, Refuse Collection, and Leaf Vacuuming);
7. Service areas 1 through 13 residential refuse, recyclable materials, yard trim, and scrap metal/e-waste collection services contract terms and requirements;
8. Montgomery County Code, Chapter 11B. Contracts and Procurement, specifically Sec. 11B-23. Multi-term contracts, Sec. 11B-27. Performance and payment security, Sec. 11B-29. Inspection and testing of supplies and services, and Sec. 11B-33A. Wage requirements;
9. Code of Montgomery County Regulations (COMCOR), Chapter 11B. Contracts and Procurement – Regulations, specifically 11B.00.01.09 Bonds and Insurance; and
10. Accounts Receivable Policies, Financial Governing Principles and Standards, effective April 1, 2020.

#### Objective 1 – Labor Peace Agreement

We obtained and reviewed relevant laws and regulations related to the LPA to identify the purpose and requirements of the provision and to determine how the inclusion of the LPA affected the county's ability to foster competition for residential collection service contracts. We also obtained and inspected residential collection service solicitation documents in effect between July 1, 2020, and June 30, 2022, as well as internal and external correspondence related to discussions around the inclusion of the LPA in solicitations. We interviewed relevant county personnel to understand the county's mission and operating activities related to the LPA provision and the considerations made to determine whether an LPA would be in the county's best interest. We also obtained final contract pricing for residential collection services recompeted between July 1, 2020, and June 30, 2022, and compared the contract pricing to proposals received by the county and prior awarded contracts.

### Objective 2 – Refuse Collection Fund

We obtained and reviewed the Solid Waste Enterprise Fund Balance Policy Memorandum and Master Authorization to analyze the effect of information and assumptions used to administer the refuse collection fund and to gain an understanding of the purpose of the refuse collection fund policy, the requirements for administering the refuse collection fund, and restrictions on utilizing funds from the Disposal Fund to cover Refuse Collection Fund expenses. We also obtained and reviewed Solid Waste Service Charges Resolutions recommended by the County Executive and County Council as well as Transportation and Environment (T&E) Committee staff reports for FY 2017 through FY 2022 for discussions related to the Refuse Collection Fund and to understand the justification for refuse collection charge increases.

We obtained and inspected DEP's Rate Model and Master Budget excel workbooks for fiscal years 2017 through 2022 to gain an understanding of the assumptions used by management in calculating and projecting the refuse collection charge to residents, and to gain an understanding of the refuse collection fund deficit balance. We performed a year-over-year variance analysis of projected vs. actual refuse collection charge assumptions from FY 2017 through FY 2022 to identify the largest variances. We also performed a root cause analysis to identify factors contributing to the refuse collection fund deficit balance and variances between projected and actuals. We analyzed and identified Refuse Collection Fund general ledger journal entries to identify any unusual journal entries that do not align with the purpose, maintenance, and operation requirements of the fund. We also interviewed staff to corroborate the observations and results made from the analysis of the root cause factors identified, and large variances.

### Objective 3 – Residential Collection Service Contract Monitoring

To determine the extent to which DEP monitors residential collection service contract terms for contractor requested price adjustments, we obtained, inspected, and analyzed residential refuse, recyclable materials, yard trim, and scrap metal/e-waste collection services contracts for service areas 1 through 13 and identified the most recent requested price adjustment for each contractor. We performed walkthroughs with DEP and Procurement staff to understand the process for receiving and approving contractor-requested price adjustments. We also obtained contract amendment documents for contractor-requested price adjustments and reviewed supporting documents from the Bureau of Labor Statistics. We compared CPI percentage parameters with CPI definitions provided under the Compensation and Adjustments sections of the Exclusive Residential Collection Service Contracts. We performed an analysis of contract CPI definitions and approved CPI percentages to determine any impact on payments made to contractors.

Additionally, to determine the extent to which DEP monitors residential collection service contract terms for performance bond requirements, we created a listing of the contractor-provided performance bonds for each service area contract during our scope period. The listing included the contractor's name, service area, contract execution and expiration date, and the amount of the performance bond required. We compared the performance bond effective dates and coverage

amount(s) to the contract execution and expiration dates and the required amount to secure faithful performance of the contract to determine whether there were any gaps in coverage. We also conducted interviews with DEP and Procurement staff to gain an understanding of how the process for monitoring whether performance bonds remain valid and in effect throughout the term of the contract, and how approvals are obtained prior to contract execution.

We conducted interviews with DEP staff to determine the extent to which DEP monitors residential collection service contract terms for service issues and service requests. We also performed a walkthrough to gain an understanding of how solid waste collection service issues and requests are monitored, including initial receipt of complaint, communication of the complaint to the contractor, the contractor's timely resolution of the complaint, tracking of the issue, and related contractor reporting of issues.

### Objective 4 – Hauler and Collector Licenses

We obtained and reviewed relevant county laws and regulations in order to evaluate controls for the processing and approval of collector and hauler licenses, as well as understand what conditions are required for issuance of a collector and hauler licenses and penalties for violation of the law. We conducted walkthroughs of one new hauler license application and one renewal collector license application from the DEP Hauler-Collector Licensing information system including reviewing relevant documentation. We also conducted testing of the information system's access controls, specifically user account management and lease privileges as defined in AP 6-7.

### Internal Controls

We assessed DEP's internal controls and compliance with policies and procedures necessary to satisfy our audit objective related to the hauler and collector licensing process and IS. We did not evaluate the internal controls of DEP to provide assurance on its internal control structure as a whole. Through walkthroughs, interviews, and review of documentation, we assessed whether internal controls related to the design of appropriate types of control activities, separation of duties, and documentation of responsibilities through policies are properly designed and implemented. However, because our review was limited, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

### Auditing Standards

We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS). 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: THE CAO'S RESPONSE

The Chief Administrative Officer provided the following response to our report:



## OFFICE OF THE COUNTY EXECUTIVE

Marc Elrich  
*County Executive*

Richard S. Madaleno  
*Chief Administrative Officer*

### MEMORANDUM

February 7, 2023

TO: Megan Davey Limarzi, Inspector General

FROM: Richard S. Madaleno, Chief Administrative Officer *RAM*

SUBJECT: Inspector General Confidential Draft Report, OIG Publication #OIG-23-010,  
Performance Audit of Solid Waste Activities

Thank you for the opportunity to respond to the issues identified in the draft report. We are committed to ensuring department compliance with County policies and effective management controls and processes in the administration of County programs and operations. Your review of the Department of Environmental Protection's (DEP) administration of solid waste activities will assist the County in ensuring improved compliance and management of these activities in the future.

I want to ensure it is clear, with regard to a statement made on page 4 of the report, that the County fully complied and cooperated with all document and information requests received from the Office of the Inspector General (OIG), consistent with the County's policy to be responsive to all such requests.

**Recommendation 1:** We recommend DEP ensure exclusive residential collection service contract Consumer Price Index (CPI) terms are updated to reflect actual criteria used.

**CAO Response:** We concur. I have directed DEP and the Office of Procurement (PRO) to determine the appropriate CPI that should be applied to the exclusive residential collection contracts and ensure that the appropriate CPI term is included and applied in future such contracts.

**Recommendation 2:** We recommend DEP ensure that all performance bond requirements are met and included in the bond prior to the execution of exclusive residential collection service contracts.

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**CAO Response:** We concur. I have directed DEP and PRO to ensure performance bond requirements are met and included in the bond secured by the contractor prior to the award of future exclusive residential collection contracts.

**Recommendation 3(a):** We recommend DEP ensure the Refuse Collection Fund is compliant with Section 48-43 of the County Code by not operating in a deficit. Consideration should be given to increasing refuse collection charges, the use of a consistent standard for contractor requested price adjustment, and implementation of practices to reduce fund expenditures.

**CAO Response:** We concur. The FY24 Recommended Budget will include a two-year plan that will ensure the Refuse Collection Fund is compliant with fund balance policies by FY25. I have directed DEP to ensure that the Refuse Collection Fund remains compliant with County Code requirements, and County fund balance policy requirements. DEP's role in ensuring compliance is also carried out in partnership with the County Council, which as noted in the report, ultimately approves refuse collection charges.

**Recommendation 3(b):** We recommend DEP ensure that the Refuse Collection Fund reserve balance is sufficient to cover the cost to replace lost service of its largest contractor for six months to allow for continuity of service.

**CAO Response:** The current fund balance policy ("Policy"; July 20, 2018) sets a balance target of between 10 percent and 15 percent of resources for the Refuse Collection Fund. As reflected in the Policy, "to guard against any interruption in service from one of the County's contracted haulers, the Executive has established a fund balance target representing the cost to replace lost service of its largest contractor for 6 months." We will continue to monitor factors influencing the Fund's risk exposure to determine whether adjustments to the Policy are needed in the future.

**Recommendation 4(a):** We recommend DEP update the IS [Hauler Collector Licensing information system] to capture the name of the user who performed the activity.

**CAO Response:** We concur. At the time of the audit, the information system (IS) was still under development. Since then, DEP stated that they have updated the IS to capture all activity events, including user log-in and any changes made by the user.

**Recommendation 4(b):** We recommend DEP comply with AP [Administrative Procedure] 6-7, Least Privilege controls by conducting annual reviews of privileged accounts to validate the need for such privileges and assigning staff to perform audit of privileged IS account functions.

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**CAO Response:** We concur. Since the time of the audit review, DEP states that they have updated system permissions to comply with AP 6-7 and have performed a review of all user accounts in the system and limited privilege/administrative access rights.

**Recommendation 4(c):** We recommend DEP establish written procedures for complying with AP 6-7 Least Privilege controls.

**CAO Response:** We concur. I have directed DEP to document the procedures developed and implemented to address the issues identified in Recommendations 4(a) and 4(b) and ensure compliance with the requirements of AP 6-7.

**Recommendation 5(a):** We recommend DEP implement separation of duties throughout the DEP licensing process.

**CAO Response:** We concur. I have directed DEP to review existing assignment of duties and responsibilities associated with the hauler licensing process and ensure appropriate separation of duties.

**Recommendation 5(b):** We recommend DEP update DEP Licensing program procedures to comply with AR [Accounts Receivable] Policy, to include separation of duties in the processing and approval of hauler and collector licenses, and issuance of Solid Waste Permit decals, and the reconciliation of license fee revenue.

**CAO Response:** We concur. I have directed DEP to work with the Department of Finance and the Internal Audit manager to ensure that the DEP Licensing program as well as the revenue collection and reconciliation procedures comply with AR separation of duties requirements. It is important to note that hauler and collector license fees can only be paid via credit card, which mitigates the potential risk of misdirection of funds.

**Recommendation 6(a):** We recommend DEP maintain an inventory listing of issued and unissued decals and conduct recurring reconciliation to ensure proper accountability.

**CAO Response:** We concur. DEP has advised me that they have begun tracking decals as of November 2022.

**Recommendation 6(b):** We recommend DEP properly secure decals to limit unauthorized access and maintain accountability.

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**CAO Response:** We concur. As part of the steps taken to respond to Recommendation 6(a), I have directed DEP to ensure this issue is addressed.

**Recommendation 6(c):** We recommend DEP establish written procedures over the safeguarding of decals, to include the disposition of unissued decals after expiration.

**CAO Response:** We concur. I have directed DEP to document procedures governing its inventory controls over Solid Waste Permit decals and ensure compliance with these procedures.

Thank you for bringing these matters to our attention.

cc: Fariba Kassiri, Deputy Chief Administrative Officer, Office of the County Executive  
Michael Coveyou, Director, Department of Finance  
Adriana Hochberg, Acting Director, Department of Environmental Protection  
John Markovs, County Attorney, Office of the County Attorney  
Gail Roper, Director, Department of Technology and Enterprise Business Solutions  
Ash Shetty, Director, Office of Procurement  
Bill Broglie, Internal Audit Manager, Office of the County Executive