APPENDIX 1

City of Mississauga Internal Audit Report

COMMUNITY SERVICES DEPARTMENT PARKS, FORESTRY & ENVIRONMENT DIVISION ENVIRONMENT SECTION WASTE DIVERSION AUDIT

November 11, 2021

City Manager's Department Internal Audit Division

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COMMUNITY SERVICES DEPARTMENT PARKS, FORESTRY & ENVIRONMENT DIVISION ENVIRONMENT SECTION WASTE DIVERSION AUDIT

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Community Services Department Parks, Forestry & Environment Division Environment Section Waste Diversion Audit

BACKGROUND

Waste diversion activities throughout City locations are an integral part of the internal Corporate Zero Waste Strategy approved by the Leadership Team in 2014. The Strategy has many goals, including guiding implementation of a series of initiatives aimed at reducing the creation of waste, increasing recycling and disposing of waste in an environmentally safe manner.

The waste diversion initiative is intended to ensure that materials are disposed of adequately and diverted from landfills. The initiative involves various divisions across the City and is coordinated by the Environmental Sustainability Unit within the Environment Section of the Parks, Forestry and Environment Division. Other divisions are responsible for waste diversion activities for locations within their purview, such as Facilities & Property Management (community centres, libraries, offices, Transit), which collects waste materials, recycling and organics, and Parks, Forestry & Environment (sports fields, playgrounds, picnic areas, trails, events) which collects only recycling and dog waste. They manage the collection of these materials, and the distribution and collection of public-facing recycling containers, by either City of Mississauga custodial employees or third-party custodial staff. Delivery and disposal of waste from City facilities to Region of Peel Integrated Waste Management Facilities (PIWMF) is either completed by Region of Peel staff or by City employees for some of the recycling managed by Parks Operations. These activities are coordinated with and supported by the Environmental Sustainability Unit on a voluntary basis, as needed by the respective business areas.

Staff from the Environment Section include a Supervisor, Environmental Sustainability, and two staff, a Waste Management Assistant and a summer student, who manage the waste diversion activities.

To achieve its goals, the unit maintains ongoing communication with the Region of Peel (responsible for landfills and collection centers), manages the third-party providers of waste diversion services, interacts with other City units to identify their service needs and provide solutions, and monitors the regulatory requirements and reporting as needed. The unit is also directly responsible for some of the waste diversion tasks, such as coordinating metal recycling, administering requests for paper shredding and disposal, coordination of fluorescent light bulb disposal, batteries collection, etc.

While the initiative encompasses all City facilities, three (3) main buildings (Civic Centre, Central Library, and 950 Burnhamthorpe) are subject to provincial regulations. The specific provincial regulations are:

- Ontario Regulation 101-94 Recycling and Composting of Municipal Waste (regulated through the Regional Municipality of Peel By-Law Number 35-2015);
- Ontario Regulation 102-94 Waste Audits and Waste Reduction Work Plans;

- Ontario Regulation 103-94 Industrial, Commercial and Institutional Source Separation Programs;
- Ontario Regulation 391/21 Blue Box (released June 2021).

SCOPE

The audit examined the business objectives related to the coordination of waste diversion initiatives within City buildings, as operated by the Environment Section's Environmental Sustainability Unit, and included aspects related to program's governance, efficiency, vendor management, reporting and compliance within this process.

Not in Scope

The audit scope did not include the following:

- Waste management processes by Parks Operations;
- Processes for the management of waste, or collection of waste and recycling at Transportation and Works Yards;
- Roadside recycling containers operation and administration process;
- Any aspect of waste management for residents, which is the responsibility of the Region of Peel.

OBJECTIVES

The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing. The purpose of the audit was to ensure that:

- A) Waste diversion activities undertaken at the City of Mississauga are administered efficiently and effectively and that relevant waste diversion regulations the City is subject to are understood and addressed;
- B) Activities undertaken for waste diversion at the City are consistent with the Corporate Zero Waste Strategy goals and that risks associated with conducting waste diversion activities are suitably managed and mitigated;
- C) The disposal of waste generated by the City's units into landfills is minimized, in accordance with the Corporate Zero Waste Strategy;
- Roles related to waste diversion are clearly defined and properly communicated and monitored;
- E) The City complies with federal, provincial, and municipal regulations and by-laws relevant to waste diversion;
- F) Waste diversion activities are carried out in a cost-effective, efficient manner and in compliance with the applicable regulatory and legal requirements.

SUMMARY OF OBSERVATIONS

The audit revealed that while certain day-to-day activities are carried out effectively by the Environment Section, the overall waste diversion program needs a more structured and integrated approach across the different units.

Some of the positive aspects we noted include:

- Strong work ethic and availability to support the different areas when requested;
- Vendor requests are managed diligently and promptly;
- Hazardous Material site registrations with Hazardous Waste Information Network (HWIN) are administered effectively;
- The Supervisor, Environmental Sustainability proactively communicates with stakeholders to manage day-to-day waste diversion issues as they arise.

In order to further advance the program goals and enhance effectiveness of the processes, our recommendations focus on the establishment of clear coordination among the different areas, in order to expand the reach of the program, improve data capture and reporting, and increase assurance over compliance requirements. The main observations are summarized below and a detailed list of our recommendations and action plans proposed by management to strengthen the program are outlined in Appendix A.

Establish a cross-functional waste diversion working group

The Environmental Sustainability Unit is expected to act as an interface among the different areas with waste diversion responsibilities, manage waste collection vendors and liaise with the waste management team at the Region of Peel. The unit makes considerable efforts in balancing stakeholder needs, administering regulatory responsibilities, managing certain vendor tasks and payments, and identifying further opportunities to reduce landfill waste.

However, the audit noted that certain relevant aspects of the program have not been formally structured, such as ownership, process for communication and reporting, and main roles and responsibilities of the various areas. Additionally, some information/data regarding these activities is not shared with the unit, and goals and metrics have not been established, resulting in inconsistent messaging.

Management informed us that they are working towards updating the internal Corporate Zero Waste Strategy. They also advised that a coordination group existed when the current strategy was established, but was discontinued in 2018 (prior to current management of the section).

Without a structured program with clearly defined ownership, governance and responsibilities, there is increased risk that less than optimal processes will be carried out and that the program is unable to fully achieve its ultimate goals.

Such risks could be reduced and the overall effort could be reinforced and streamlined with the establishment of a Waste Diversion Working Group comprised of the relevant units and divisions. The purpose of this working group should include supporting the advancement of related aspects of the Corporate Zero Waste Strategy to facilitate information flow, transparency, clear ownership and reporting of waste diversion activities across the City. The

group should also be tasked with providing input to the future development of the refreshed strategy.

Formalize a contingency plan and procedural documentation for key controls and processes

The Environmental Sustainability Unit has started organizing the processes around waste diversion by establishing a list of key responsibilities that include related units in other divisions, such as Facilities & Property Management, Works Operations & Maintenance and others. Procedural documentation regarding the activities undertaken directly by the Environmental Sustainability Unit or under their coordination has not yet been developed.

Additionally, while unit staff has demonstrated that some consideration has been given to how to deal with process disruptions, a comprehensive contingency/business continuity plan that includes such elements as consideration of alternate storage capacities/capabilities and utilization of alternate City resources has not been established.

Establish Service Level Agreements or contracts for relevant vendors and monitor vendor performance and compliance

The Environmental Sustainability Unit directly manages four vendors, in order to facilitate the diversion of shredded paper, scrap metals, organic waste, and fluorescent light bulbs. While most of these services fall under the "Low Value Acquisition" (LVA) threshold and, therefore, do not require a formal tender or a contract, they present some critical aspects that can potentially generate liabilities at much higher amounts (in the form of fines in case of non-compliance with the disposal or labour relations requirements, or damages if contamination occurs). Additionally, without a formal agreement, the availability of these services in emergency situations is not guaranteed. Such agreements can be established either as a formal contract or a Service Level Agreement establishing the City's requirements related to compliance and availability.

Automate tracking, approval, confirmation and archiving of vendor service requests

There is a great deal of dialogue with City business areas around service requests for Iron Mountain. The communication is usually conducted via emails, in a suboptimal manner. Setting up waste diversion service requests in an automated tool (for example, the existing Infor application for asset/work order management tasks, and MIRA for workflow automation), could help facilitate centralized tracking, approval, confirmation and archiving for these transactions within the City.

CONCLUSION

Based on these observations, the audit concluded that the control environment around the waste diversion program needs improvement, mainly in aspects of governance, communication, contingency plans, data capture and reporting. It is worth noting that dedicated staff are administering operational activities diligently and that management had started analyzing and searching for solutions to some of the challenges reported herein, prior to the audit's commencement.

The audit results summarized above were discussed in further detail with the Environment Section's management, who provided detailed action plans to implement the recommendations.

They include enlisting support from areas such as Corporate & Department Communications and Corporate Performance & Innovation to help with some of them.

A total of eight (8) recommendations resulted from this audit. Details of the audit recommendations and management comments may be found in Appendix A.

The audit recommendations were classified as follows:

Classification	High	Medium	Total
Efficiency and Effectiveness	0	2	2
Compliance with and Clarification of Corporate Requirements	1	4	5
Operational Control and Financial Reporting	0	1	1
Total	1	7	8

Management has agreed to all the recommendations and has developed plans to address them. Four (4) will be completed in 2022, two (2) will be completed in 2023, and the remaining two (2) will be completed in 2024, contingent on leadership approval and the completion of the 2022 and 2023 targets within this report.

Internal Audit would like to thank the Environment Section management and employees for their time, support and assistance during this audit.

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Auditors: Yianni Foufas Senior Internal Auditor

> Barb Webster, PMP Senior Internal Auditor

Community Services Department Parks, Forestry & Environment Division Environment Section Waste Diversion Audit Summary of Audit Recommendations

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Recommendation	Priority (H/M/L)	Comments/Status	Classification	
That the Environmental Sustainability Unit establish a cross- functional working group with the purpose of facilitating information flow, transparency, clear ownership and reporting of waste diversion activities at the City. The creation of this group should be coordinated with other areas within the City with impact or responsibilities regarding the administration, monitoring and operation of waste diversion. This working group should be guided by a Program Charter aligned with the objective of the City's Zero Waste Strategy, support an effective communication plan, develop metrics and reporting, and provide input to the development of future strategic plans regarding the program.	H	 Management agrees with the above findings and will complete the following: i) In Q1, 2022 Environment Manager and Environmental Sustainability Supervisor will draft a Project Charter outlining the establishment of a cross-functional waste diversion working group. The charter will prioritize work on; 1) City impacts of the new Ontario Blue Box regulation (O.Reg.391/21); 2) a refresh of the Corporate Zero Waste Strategy, and; 3) creation of implementation plan for the Strategy. ii) Environment Manager and Environmental Sustainability Supervisor will work with Business Planning consultant to review and finalize the draft project charter and determine internal objectives and financial needs. The project charter will then be sent to the Steering Committee for approval. iii) Based on the project charter outcomes, establish working group. Through the implementation plan, the cross-functional working group will facilitate waste diversion information flow, transparency, clear ownership and reporting of waste diversion activities at the City. 	Compliance with and Clarification of Corporate Requirements	
	That the Environmental Sustainability Unit establish a cross- functional working group with the purpose of facilitating information flow, transparency, clear ownership and reporting of waste diversion activities at the City. The creation of this group should be coordinated with other areas within the City with impact or responsibilities regarding the administration, monitoring and operation of waste diversion. This working group should be guided by a Program Charter aligned with the objective of the City's Zero Waste Strategy, support an effective communication plan, develop metrics and reporting, and provide input to the development of future strategic plans regarding the	(H/M/L)That the Environmental Sustainability Unit establish a cross- functional working group with the purpose of facilitating information flow, transparency, clear ownership and reporting of waste diversion activities at the City. The creation of this group should be coordinated with other areas within the City with impact or responsibilities regarding the administration, monitoring and operation of waste diversion. This working group should be guided by a Program Charter aligned with the objective of the City's Zero Waste Strategy, support an effective communication plan, develop metrics and reporting, and provide input to the development of future strategic plans regarding theH	(H/M/L)That the Environmental Sustainability Unit establish a cross- functional working group with the purpose of facilitating information flow, transparency, clear ownership and reporting of waste diversion activities at the City. The creation of this group should be coordinated with other areas within the City with impact or responsibilities regarding the administration, monitoring and operation of waste diversion. This working group should be guided by a Program Charter aligned with the objective of the City's Zero Waste Strategy, support an effective communication plan, develop metrics and reporting, and provide input to the development of future strategic plans regarding the grogram.HHIII Environment Manager and Environmental Sustainability Supervisor will a refresh of the Corporate Zero Waste Strategy, and; 3) creation of implementation plan for the Strategy.III Environment Manager and Environmental Sustainability Supervisor will work with Business Planning consultant to review and finalize the draft project charter and determine internal objectives and financial needs. The project charter will then be sent to the Steering Committee for approval.III) Based on the project charter outcomes, establish working group. Through the implementation plan, the cross-functional working group will facilitate waste diversion	

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Community Services Department Parks, Forestry & Environment Division Environment Section Waste Diversion Audit Summary of Audit Recommendations

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2	That the Environmental Sustainability Unit work with the	М	Management agrees with the above findings	Compliance with		
	Human Resources Health & Safety Section to determine the training and certification requirements for vendors and their		and will complete the following:	and Clarification of Corporate		
	employees/contractors for the handling of hazardous waste.		Environment Section to work with cross- functional waste diversion working group and Materiel Management to identify current contracted waste diversion vendors that each section manages to obtain policies and procedures related to legislated hazardous waste materials training/certification that the vendors have documented for handling of hazardous waste. After these documents have been provided by the vendors, Environment Section to work with HR Health & Safety Section and Legal to review and provide recommendations. If the information provided is not sufficient from a regulatory perspective, to review and obtain any additional documentation that might be required from the vendors.	Requirements		
			To be completed by September 30, 2023			
3	That the Environmental Sustainability Unit work with Materiel Management and other areas within the City who require disposal of hazardous waste materials to ensure the vendors' employees and contractors they use have and maintain the required training and credentials/certifications.	Μ	Environmental Sustainability Supervisor to work with cross-functional waste diversion working group and Materiel Management to identify any additional internal stakeholders that manage hazardous waste. Based on the outcome of Recommendation 1, work with internal stakeholders to identify any additional contracted hazardous waste management service providers completing hazardous waste service and request documentation regarding policies and procedures that identify training/certification information for these contracted vendors. Additional internal	Compliance with and Clarification of Corporate Requirements		

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			stakeholders identified and contract managers will request information from hazardous waste contract vendors, to be reviewed by Health & Safety and Legal. To be completed by April 30, 2024	
4	That the Environmental Sustainability Unit develop procedural documentation for the key processes and controls they are responsible for.	М	Management agrees with the above findings and will complete the following: Environmental Sustainability Supervisor and/or Waste Management Assistant to complete flow chart outlining waste management processes and controls that are their unit's responsibility. Waste Management Assistant to develop documentation on logistics for completing waste management requests that are their unit's responsibility (step-by-step process detailing the "who, what, where, why and how" of the process). To be completed by November 30, 2022	Compliance with and Clarification of Corporate Requirements
5	That the Environmental Sustainability Unit develop a documented contingency plan for roles within the unit.	М	Work with other stakeholders both internal (cross-functional waste diversion working group) and external (Region of Peel) to identify additional support for various waste management services that may be disrupted due to unforeseen circumstances. Develop contingency plan document based on these discussions. Share contingency plan with cross-functional working group (in conjunction with Recommendation #1) for approval. To be completed by January 31, 2023	Efficiency and Effectiveness

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6	That the Environmental Sustainability Unit ensure that current agreements in place with vendors remain in compliance with terms. If an agreement is not in place for a vendor, then the Environmental Sustainability Unit should work via the cross-functional working group (when established) and Materiel Management to ensure a current contract or Service Level Agreement (SLA) is established with clear wording about performance expectations, indemnification, and dispute resolution steps. As part of the SLAs the respective vendors should be required to provide aggregate reporting of their services to the City to facilitate more complete reporting of waste diversion activities.	M	Management agrees with the above findings and will complete the following: Environmental Sustainability Supervisor to work with cross-functional waste diversion working group and Materiel Management to identify existing waste diversion service providers. Contract managers to review existing waste diversion agreements. If agreements are not in place for a vendor then the contract manager responsible for the service provider should review existing contracted waste diversion service providers to determine if they can provide the required service or work with Materiel Management to ensure a current contract or SLA is established.	Compliance with and Clarification of Corporate Requirements
7	That the Environmental Sustainability Unit monitor, analyze and report the total cost of waste diversion activities. The Environmental Sustainability Unit should work with Finance to facilitate a process to monitor all the costs associated with waste diversion activity at the City, and to compile data of true costs so as to complete holistic analysis and identify duplication of work efforts, inefficiencies, or excessive expenditures. To support this analysis the Environmental Sustainability Unit should also consider compiling a list of all City contractors or waste service providers that may have responsibilities related to waste diversion and hazardous waste handling, with the support of Legal and/or Materiel Management.	М	To be completed by October 31, 2022 Management agrees with the above findings and will complete the following: Once the working group is established, one of the actions will be to examine third-party waste diversion contracted vendors' costs. Materiel Management, Finance and/or Legal to support the identification of existing waste diversion contracts/agreements for review with the cross-functional waste diversion working group. We will need to align with Ontario Blue Box Regulations and Producer funded public space recycling beginning October 2024.	Operational Control and Financial Reporting

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			The analysis and reporting on total cost of	
			waste diversion activities will be limited to third-party waste diversion vendors and will not include waste and recycling activities as part of the City's capital and operating budgets, e.g. Parks Operations. To be completed by October 31, 2024	
8	That the Environmental Sustainability Unit work with IT to complete an analysis of the viability of using Infor or a comparable tool to help manage the transactional workload of the Supervisor, Environmental Sustainability.	М	Management agrees with the above findings and will complete the following: Environmental Sustainability Supervisor to work with IT to determine feasibility of using Infor or another software tool to help manage the workload of waste diversion service requests. To be completed by December 31, 2022	Efficiency and Effectiveness