

City of Mississauga
Internal Audit Report

COMMUNITY SERVICES DEPARTMENT
RECREATION & CULTURE DIVISION
GOLF & ARENAS SECTION
ARENA PLANT OPERATIONS AUDIT

November 8, 2024

City Manager's Department
Internal Audit Division

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**COMMUNITY SERVICES DEPARTMENT
RECREATION & CULTURE DIVISION
GOLF & ARENAS SECTION
ARENA PLANT OPERATIONS AUDIT**

Distribution Lists

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- Director, Recreation & Culture
- Manager, Recreation – Golf & Arenas
- Manager, Recreation – North District
- Manager, Recreation – South District

**Community Services Department
Recreation & Culture Division
Golf & Arenas Section
Arena Plant Operations Audit**

BACKGROUND

The Recreation & Culture Division operates 24 indoor refrigerated ice pads at 13 arenas across the City. This is a collection of multi-pad, standalone arenas, and ice pads that are within community centres.

The arenas are rented out to various user groups and are used for community programming, such as Learn to Skate or drop-in Fun Skates and Shiny. The arenas are well utilized throughout the fall/winter seasons. Certain locations offer ice 12 months a year, while others are converted for other community uses in the summer. These facilities are located in three districts within the Recreation & Culture Division – North District, South District, and Arenas/Golf Districts. Each facility is run by a Facility Manager, Supervisor of Operations and full-time and part-time Operators.

There are several factors that help to ensure safe and well-maintained arena facilities for the public and staff. These include safe and effective replacement, maintenance, and operation of equipment (such as refrigeration plants, ice surfacing machines, personnel lifts, etc.) and safe operations and management of arena rinks (such as boards, gates, access, signage, etc.).

Arenas receive a large number of visitors each year. For example, in 2023, Iceland Arena received approximately 817,000 visitors, and Meadowvale 4 Rinks welcomed about 377,000 visitors. The arenas' line of business is the largest revenue generator within the Division, at nearly \$8 million annually.

This audit was selected as part of the Internal Audit Work Plan 2024-2026, which was approved by the Audit Committee on March 18, 2024.

SCOPE

The audit examined arena plant functions to assess compliance with health and safety regulations, and included operational and maintenance activities performed in refrigeration plants, technical rooms, and arena rinks. The audit focused on indoor arenas that have refrigeration systems. The period of review included 2022-2023.

Out of Scope

The audit excluded the following:

- Customer service operations (rentals, program registrations, etc.),
- Community Centre operations, and
- Outdoor arenas and arenas operated outside the Recreation & Culture Division.

AUDIT OBJECTIVES

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

- A) Arena plant operations were compliant with applicable health and safety legislation, standards, by-laws and policies;
- B) An asset management plan for rinks and refrigeration plants was in place;
- C) Maintenance and operations conducted on arenas were adequately managed; and,
- D) An effective information management and communication system was in place.

SUMMARY OF OBSERVATIONS

Arena teams are responsible for the operational and maintenance activities required to ensure that arenas provide services to customers and remain safe for staff and patrons. Arena plant activities are governed by the Technical Standards and Safety Authority (TSSA) and by more than 20 City-developed Standard Operating Procedures for Operations (known as OPS's). The TSSA inspects City arenas at least once every two years to assess compliance with the TSSA Standards.

During this audit, City OPS's were reviewed, arena teams were interviewed, and three arena site visits were conducted in which approximately 60 tests were applied on processes, activities, documents, and equipment at each arena.

Results of this audit showed that operational and maintenance activities at the arenas were well-developed. This was evident from established and thorough OPS's that were developed by the Standard Operating Procedures Committee of the Division, which were based on the TSSA Standards and enhanced by integrating Ontario Recreation Facilities Association Inc. (ORFA) best practices. The Committee regularly monitors and updates OPS's to align with new regulatory and industry requirements. Furthermore, it was observed that staff were provided adequate training to perform their activities, and that the Infor Work Order System was utilized to manage operational and maintenance work.

From a governance perspective, work order inspections were performed by arena supervisors and managers, and reports were regularly provided to district and division managers for their review and action as needed. Additionally, a specialized third-party contractor performs maintenance work on arena refrigeration rooms, and arenas are equipped with different types of alarms (e.g. ammonia, carbon monoxide, fire, and security alarms) that are connected to the Building Automated Systems (BAS's), and to Corporate Security, as applicable.

The primary observations from this audit relate to introducing changes to operational activities to better align with OPS's, enhancing the management of Personal Protective Equipment (PPE), and improving the reliability of Infor work orders.

The audit observations and recommendations were provided to management. Appendix A provides the detailed recommendations and corresponding management comments that include the proposed action plans to address these recommendations.

The main audit observations and recommendations are outlined below.

Introduce changes to operational activities to better align with OPS's

We observed operational activities at three arena site visits, and it was noted that they were generally performed effectively. However, there were some operational gaps identified, including:

- Work that should be performed by two staff members was not always done in pairs.
- At one arena, the team was not aware of an OPS that applies to their work.
- At one arena, spare glass was securely located near the rink but was not protected.
- In the refrigeration room of one arena, liquids, containers and chemicals were not appropriately closed and stored safely.
- The security and access to keys by staff and third-party vendors can be improved, with consideration of practices at other arenas.

These operational gaps introduce safety risks to City staff and patrons, and some of them may result in inefficiencies. Therefore, it is important that action be taken to manage these gaps and improve arena processes.

Management indicated that actions to resolve many of these findings were underway, and some were already completed.

Enhance the management of Personal Protective Equipment (PPE)

Arena staff are required to use PPE when performing certain operational and maintenance activities. It was observed that, in most cases, PPE is utilized in accordance with operating procedures. PPE can be either for individual use (e.g. face mask) or shared (i.e. rubber gloves and aprons). Infor work orders were generated monthly for staff to inspect PPE quantities, condition, and where applicable, calibration of devices and expiry dates on filters.

The site visits identified some instances where PPE utilization did not align with OPS requirements. Examples include inability to locate expiry date of filter, personal ammonia detectors requiring calibration, insufficient number of refrigeration room entry PPE, anti-cut safety gloves not always used when changing Zamboni blades, and availability of spare PPE.

The PPE observations identified above, although isolated in some instances, are important to address with other arenas to promote the health and safety of staff and patrons of these arenas.

Enhance the reliability of Infor work orders

The Infor Public Sector System is currently used by arena staff to schedule and manage activities such as inspections, measurements, and maintenance. We analysed the data of

7,925 Infor work orders from January 2022 to December 2023 for the three arenas, and noted concerns related to data integrity and system access.

Data integrity concerns identified included 335 work orders closed before their scheduled start times, 42 work orders delayed in completion/closure beyond 100 days, 33 work orders terminated without justification, and 111 work orders which were not assigned to staff and did not have start and close dates. Management indicated that the transition from the MyWork system to the Infor system that occurred during this period might have caused some of these discrepancies, and will investigate these discrepancies further.

Additionally, one arena that was under construction and not operational during the implementation of the Infor work order system has not included their assets in the system since reopening in the summer of 2023. This would make it difficult to manage the operational and maintenance needs of the arena assets.

Arena staff had inconsistent authority levels in the Infor system. It was noted that all arena staff had access to the Front-Line user interface of Infor; however, in many instances, staff had authority levels that exceeded their roles and that did not pertain to arenas or community centres that they were responsible for.

CONCLUSION

In general, arena plant operations are managed effectively, and are conducted in line with regulatory requirements. A formal structure is established to develop and maintain OPS's, Infor work orders are utilized to guide staff, and training is provided to ensure that they have adequate skills to perform maintenance activities. However, this audit highlighted some areas for improvement such as introducing changes to operational activities to better align with OPS's, enhancing the management of PPE, and improving the reliability of Infor work orders.

This audit resulted in nine (9) recommendations. Management has agreed to all of them, and has committed to completing one (1) recommendation by the end of this year, three (3) by March 2025, three (3) by June 2025, one (1) by September 2025, and the last recommendation by the end of 2025.



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**Community Services Department
Recreation & Culture Division
Golf & Arenas Section
Arena Plant Operations Audit
Summary of Audit Recommendations**

Rec	Recommendation	Priority (H/M/L)	Comments/Status	Category
1	That activities be performed in pairs when it is a requirement of the OPS. Consider including information about working in pairs in the respective work orders, to ensure that work is scheduled based on resource availability.	M	Work orders across all locations that require two staff members to perform the task safely and effectively will be identified and updated in Infor to ensure this requirement is met before being assigned by the Supervisor. To be completed by March 31, 2025.	Compliance with laws, regulations, policies, procedures, and contracts
2	That (A) site specific supporting documents be formalized by introducing document control features (like version control, linking to SOP's, referencing in training, etc.) and that (B) management communicate and train staff on all OPS's specific to the arena they work at. Particularly, gaps identified in this audit include knowledge and availability of procedures-related installation of carpets (OPS 035), storage and safety requirements for glass (OPS 50), and appropriate labelling and storage of liquids, canisters, and chemicals (OPS 58).	M	(A) Will work with our Operations Standards Committee team to ensure site-specific documentation is linked properly with version controls in place to ensure the most up-to-date information is being used at each facility. (B) District Managers to review and discuss this recommendation at the respective Facility Manager, and Supervisor, Operations team tables to ensure that OPS's specific to their own facilities are addressed and adhered to. Additional site-specific training for Operators will be completed and documented on an annual basis by all Supervisors who are responsible for an arena, to go over these requirements and ensure each site has a system in place. This will also be added as an additional annual Compliance Check for Supervisors, Operations. To be completed by June 30, 2025.	Compliance with laws, regulations, policies, procedures, and contracts
3	That a consistent and effective process be established for arenas to manage keys and third-party access.	L	District Managers have explored other systems to inventory and track keys (Traka Box) but they were not economically feasible and practical for most of our facilities. Recommendation is that Supervisors ensure that a key log is in place at each facility, and that the	Safeguarding of assets

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			<p>key box is kept locked in a secure place, such as the Supervisor's office. This will also be added as an additional annual Compliance Check for Supervisors, Operations.</p> <p>To be completed by December 31, 2024.</p>	
4	<p>That (A) the oversight of the implementation of PPE inspections and maintenance work orders be enhanced to ensure adequate execution, including the availability of spare PPE for emergency use (e.g. that supervisors' inspections include checking if staff are tracking filter replacements, calibration dates, appropriate quantities of PPE, etc.). That (B) clarification be provided to staff if, "Anti-cut safety gloves must be worn during blade changes," (as per OPS 45), while staff are using Conti Blade Changing Assist. OPS 45 should be updated, as required.</p>	H	<p>(A) To be added to Supervisor, Operations Compliance Checks at appropriate recurrence level based on Standard and manufacturer's recommendations. Furthermore, introduce an additional quarterly Compliance Check to Supervisors, Operations to ensure adequate PPE supplies for everyday use and emergency situations are always maintained. Appropriate levels of PPE that need to be maintained will also be established and included as part of the Compliance Check.</p> <p>(B) This is currently a gap in our SOP, since most, if not all arena locations have moved towards the Conti system. This will be reviewed further with the Operations Standards Committee and considered with manufacturer's safety recommendations. Regardless if gloves are deemed necessary or not, the wording in OPS 45 will be updated. In the meantime, staff will be advised to wear the gloves until the Standard is updated or clarified.</p> <p>To be completed by June 30, 2025.</p>	<p>Compliance with laws, regulations, policies, procedures, and contracts</p>
5	<p>That supervisors include random spot-checks to ensure logbooks are completed accurately and completely. The business can determine the effective method and frequency of these spot-checks. Supervisors' and Facility</p>	M	<p>This recommendation will be reviewed with Supervisors, Operations and Facility Managers, with the suggestion that they do additional frequency spot-checks to start 2025 and discuss with their Operations teams who is doing the</p>	<p>Compliance with laws, regulations, policies, procedures, and contracts</p>

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	<p>Managers' spot-checks should also ensure that:</p> <ul style="list-style-type: none"> - Logbooks include all measurements and inspections, and any data corrections include justification and initials. - Zamboni operators document their daily/pre-use inspections in the logbooks. - Refrigeration maintenance logbooks are being used in all arenas and the logbooks have complete and clear records. 		<p>readings and various recordings. This will then be discussed and re-affirmed in upcoming facility Operations team meetings.</p> <p>Verification Reports through Infor via the Supervisor will continue to be the primary way these spot-checks will occur and be documented with existing work orders (i.e. ice thickness). Supervisors should be aware and looking for this through spot-checks when touring their facilities, and making sure they address any missing information or details immediately, and follow up with specific staff accordingly, as required. Suggested that completed and accurate logbook information and detail is added to the Supervisor, Operations' Compliance Check, and confirmed by the Facility Manager.</p> <p>Ensure and confirm with Supervisor, Operations that all arenas are using the proper Refrigeration Maintenance Logbooks. These will be ordered if not currently in place.</p> <p>To be completed by March 31, 2025.</p>	
6	<p>That data integrity concerns within the Infor System be corrected, including:</p> <ul style="list-style-type: none"> - Work orders that were closed (as completed) before their scheduled start dates. - Work orders that were delayed in completion/closure beyond 100 days. - Work orders that were cancelled without any documented reasons/justification. 	H	<p>Recommendations noted will be addressed and updated in Infor appropriately to ensure reporting is accurate and effective, and provides the right level of detail. Further training will also be performed with Facility Managers and Supervisors, Operations.</p> <p>Full review of assets will be performed in Q1 2025, and updated accordingly in Infor.</p> <p>To be completed by September 30, 2025.</p>	Reliability and integrity of financial and operational information

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	<ul style="list-style-type: none"> - Work orders that were not assigned to any staff member and did not have any start or close dates. - Assets/machines that were not recorded. <p>Additionally, develop a mechanism to identify these anomalies in order for them to be corrected in a timely manner.</p>			
7	<p>That Facility Managers work with the Asset Management Team to ensure that all pertinent information (i.e. third-party maintenance work) is uploaded in the Infor system to monitor timely maintenance of the equipment and assist with the assets' lifecycle replacement needs.</p>	M	<p>We will confirm with the Infor Field Inspectors (IFI) Team if this is possible by Q4 2024. If it is, we will look to building this into the new third-party refrigeration agreement with the vendor (starting Sept.1, 2025).</p> <p>If it is not possible to automatically upload all refrigeration work orders into Infor by the vendor, Recreation will develop an improved system and process to ensure that all work orders are inputted so that Asset Management has this information annually to keep records up to date.</p> <p>To be completed by December 31, 2025.</p>	Effectiveness and efficiency of operations and programs
8	<p>That role-based access for the Infor system be defined and documented by the Facility Managers and Infor team. Regular review of the access list should be conducted by the Facility Managers to ensure that the staff has access to the Infor system based on their job profiles.</p>	M	<p>Clearly define what level of access will be granted to: Op1, Op2, Supervisors, and Operators who are on contracts.</p> <p>Develop a review of access levels across all locations on a periodic basis to ensure consistency. Consider adding this to an existing Facility Manager Compliance Check, much like is done with SharePoint access.</p> <p>To be completed by June 30, 2025.</p>	Safeguarding of assets

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9	That OPS 43 (Maintenance & Inspection) be updated to reflect the utilization of the Infor Work Order System, including updating the approval process for exceptions and additions to the arena maintenance work orders (where the authority levels are).	M	<p>Ensure that the Operations Standards Committee communicates any updates where work orders in Infor would be impacted or changed.</p> <p>Suggest this be added as a procedural step before finalizing and approving changes to any Standards.</p> <p>To be completed by March 31, 2025.</p>	Compliance with laws, regulations, policies, procedures, and contracts
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