



# BUSINESS CASE

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Recreation Department  
Spencerville Arena Dehumidifier

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**2025 Budget**

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## Parks & Facilities Spencerville Arena Dehumidifier

### Executive Summary

We are requesting approval and funding for the installation of a second dehumidifier in the Spencerville Arena. The need for this additional equipment has become increasingly urgent due to shifting seasonal weather patterns, particularly the trend toward extended warmer falls and earlier springs that we have experienced in recent years. These climate changes are affecting the performance of our arena's ice surface and increasing the operational challenges we face in maintaining ideal conditions for both players and spectators.

### Business Need

As you are aware, the primary function of a dehumidifier in an ice arena is to control the humidity levels in the building, which directly impacts the quality of the ice surface and the comfort of those using the facility. In recent years, the warmer temperatures during fall and spring have made it more difficult to maintain the proper balance of temperature and humidity. Higher humidity levels in these extended shoulder seasons can lead to several issues, including:

#### **Reduced Ice Quality:**

Excess moisture in the air can cause condensation on the ice surface, leading to soft ice, pitting, and inconsistent playing conditions. This not only affects the quality of the game but also increases maintenance costs and downtime for resurfacing the ice.

#### **Increased Energy Consumption:**

When humidity levels rise, our current dehumidifier struggles to keep up, forcing our cooling systems to work harder to maintain the desired temperature for the ice surface. This results in higher energy consumption and increased utility costs, impacting both operational budgets and environmental sustainability.

#### **Building Comfort and Safety:**

Excessive humidity can also lead to discomfort for spectators, players, and staff, contributing to an unpleasant atmosphere within the arena. Additionally, high humidity levels can accelerate wear and tear on the building infrastructure and equipment, leading to more frequent repairs.

### Options or Solutions Analysis

Given these challenges, the addition of a second dehumidifier would significantly improve our ability to maintain optimal humidity levels throughout the year. This would

ensure better ice quality, reduce energy consumption, and enhance the overall experience for all users of the arena. By having an additional dehumidifier to handle the increased load during the warmer seasons, we would be able to maintain a more stable and efficient environment year-round.

### Financial and/or Non-Financial Benefits

This results in higher energy consumption and increased utility costs, impacting both operational budgets

### Risk Analysis

By not having the second unit in place it creates more work for the current unit and increases the humidity levels in the arena for longer periods.

### Recommendation

Proceed with issuing a tender document for the installation of a second dehumidifier through our Canoe procurement and to have it in place for the start of the fall hockey season.

### Implementation Plan

Project would completed this summer.

### Lead Department

Prepared

By: [Mike Spencer

Date: January 8, 2025

Signature:



Approved

By:

Jessica Crawford, Treasurer

Date: January 9, 2025

Signature:



Approved

By:

Sean Nicholson

Date: January 9, 2025

**Signature:**

A handwritten signature in black ink, consisting of a large, stylized initial 'G' followed by a cursive name.