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August 21, 2025

Sharon Hepburn  
Starbuck Transportation System Inc.  
260 Waydom Drive  
Ayr, Ontario N0B 1E0  
519-571-4933  
sharon@westayr.ca

**Re: Emission Assessment for 260 Waydom Drive, Ayr, Ontario  
260 Waydom Drive  
RWDI Reference No. 2512931**

Dear Sharon,

RWDI was retained through Tacoma Engineers, acting on behalf of Starbuck Transportation System Inc., to prepare an emission assessment for a Zoning By-law Amendment application to permit a commercial cannabis cultivation facility operating at 260 Waydom Drive in Ayr (the "**Subject Site**"), in the Township of North Dumfries (the "**Township**"). The Township describes the Subject Site and associated Zoning By-law Amendment application as follows:

*"The subject property, known municipally as 260 Waydom Drive is developed with an existing industrial building consisting of a total building area of 1,125.3 square metres (12,113 square feet). The industrial building underwent renovations in 2020 that saw a 650.3 square metre (7,000 square feet) addition added to the rear of the then existing building, which was only 475 square metres (5,113 square feet) in size. The industrial building is currently being used to grow commercial cannabis within the enclosed building, which is not a permitted use under the applicable Z.11 – Industrial zoning classification of the Township's Zoning By-law No. 689-83, applied to the property. As such, the applicant has submitted a Pre-Consultation Application to evaluate the requirements for submitting a Zoning By-law Amendment application to establish the appropriate permissions to operate a commercial greenhouse on the property."*

As part of their review, Township staff have had the following comment with respect to the future Zoning By-law Amendment and Site Plan Application:

*"Please note that Township Staff will require that an Emissions Assessment be prepared to evaluate and mitigate any potential environmental impacts associated with the cultivation of cannabis indoors, including but not limited to, odor control, air quality, and any other emissions that could affect the surrounding property owners."*

This letter is intended to satisfy the requirement for the emission assessment.



## Site Visit

I visited the Subject Site on the morning of June 11, 2025, and met with personnel to tour the operations and gain an understanding of potential sources of air emissions.

## Facility Description

The facility produces cannabis for medical purposes through licences under the Cannabis Regulations. No processing of cannabis occurs on site. The cannabis cultivation rooms operate on a closed-loop climate-control system, which regulates the temperature, humidity and other parameters to facilitate optimal growth. Other areas inside the building are used for maintenance or storage purposes, and do not generate odours.

## Regulatory Context

With respect to air emissions, the Cannabis Regulations (SOR/2018-144) have specific requirements with respect to the potential emission of odours into the outside air, as noted in Section 85 (1):

### ***System — filtration and ventilation***

*85 (1) Any building or part of a building where cannabis or anything that will be used as an ingredient is produced, packaged, labelled, stored or tested must be equipped with a system that*

- (a) filters air to prevent the escape of odours associated with cannabis plant material to the outdoors;*

Therefore, any exhaust systems that can release odours into the outside air must be filtered to prevent this. The most common form of filtration used for cannabis odours are activated carbon filters, which remove organic compounds, including those associated with cannabis odours, from the exhaust stream.

## Sources of Air Emissions

The facility does not have any dedicated exhaust systems that can discharge air from the cannabis cultivation operations to the outside air. All air in the cannabis cultivation facility is recirculated back into the building through a closed-loop heating, ventilation and air conditioning (HVAC) system. There is a single exhaust system; however, this is currently sealed and not in use. Should this system be used at some time in the future, it is already equipped with a cannister-type carbon filtration system.



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There is also an emergency exhaust system in the event of a build-up of carbon monoxide or carbon dioxide, but as this is an emergency exhaust system only, it does not normally allow odours to be released into the outside air.

This effectively limits the egress of odours into the outside air to fugitive releases through open doors or leaks. During my site visit, no cannabis odours were detected anywhere on the Subject Site, except immediately adjacent to the entrance door.

The only other potential sources of air emissions include sources such as natural gas-fired heating equipment and standby power systems, which are not significant sources of air emissions. The Ministry of Environment Conservation and Parks classify this size and type of equipment as insignificant and are exempt from requiring approval under the Environmental Protection Act.

## Potential for Odour Impacts

Based on my site visit and understanding of the operations, it is my opinion that there is no significant emission of cannabis odours from the facility, due to the self-contained nature of the operation. Therefore, I do not expect odour emissions to be a concern in the surrounding community.

## Conclusions

The cannabis cultivation facility at 260 Waydom Drive does emit negligible levels of cannabis odours into the atmosphere and is not expected to pose a risk of odour impacts in the surrounding community.

This satisfies the requirement from the Township to provide an emission assessment, as there are no significant emissions.

Yours truly,

A handwritten signature in black ink, appearing to read 'B. Sulley', with a long horizontal flourish extending to the right.

Brian G. Sulley, B.A.Sc., P.Eng.  
Technical Director, Principal  
RWDI

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