### **DEPUTATION IN WRITING**

# COMMITTEE OF THE WHOLE NOVEMBER 5, 2020

Subject: Re-opening of Businesses

**Spokesperson:** Ed Skrobal

Name of Group or person(s) being represented (if applicable):

Markham Sports Dome Inc. and Mount Joy Sports Dome Inc.

#### Brief summary of issue or purpose of deputation:

Further to the York Region Council scheduled for Monday, November 2nd at 8:30 am, I would like to add the following as my deputation regarding the upcoming discussions of coming out of a modified Stage 2 and back into Stage 3:

I am the owner of the Markham Sports Dome, a 70,400 sq foot indoor domed soccer facility open since 2015 and located on York Catholic District School Board lands (Father Michael McGivney Catholic Academy) at McCowan Rd and Hwy 407, and I also own the Mount Joy Sports Dome, a 27,000 sq foot indoor domed soccer facility open since 2016 and located on City of Markham property near Markham Rd and 16th Avenue.

I am the epitome of the small businessman struggling financially under the weight of the Covid lockdown.

We understood, although found it extremely difficult financially, to close down after the March breakout of the Corona virus. We lost a great deal of money due to this total lockdown.

However, we are striving to understand the current lockdown procedures as it relates to the use of our facility, since, we are able to offer, for example, at the Markham Sports Dome 17,600 sq feet per segregated field, with a ceiling height of 66 feet, under an HVAC system that allows for a complete fresh air turn in as little as 1.5 hours......and yet we are only able to allow 10 people to play at any one time?

Here are a few key facts about ventilation and airflow inside the Markham Sports Dome as provided the by The Farley Group, manufacturers of the dome:



1. The Air Quality In a Dome Resembles Outdoor Conditions.

The Markham Sports Dome contains approximately 5,000,000 cubic feet of air; for a topical comparison, a typical classroom contains just 6,000 cubic feet of air.

Dome Ventilation Is Remarkably Better Than In Most Buildings.

Under ASHRAE standards, a normal classroom's ventilation is designed to move 222 cubic feet of air per minute; domes have a minimum of 50 times more outside fresh air!

3. There's Tons of Room To Breathe In a Dome.

At 6-foot social distance, a dome provides about 800 cubic feet of ventilation air per person per minute; a typical classroom with 20 students would provide 11 cubic feet.

Additionally, Gerald N. Catt, Professional Engineer, has prepared a brief report on the advantages of domes over conventional buildings in preventing the spread of COVID-19. Read his analysis of dome ventilation and air turnover as attached to this email.

We have also instituted extensive control procedures for access/egress of the facility, have purchased an electrostatic sprayer for daily facility cleaning and purchased a synthetic turf disinfectant unit known as the GreenZapr that kills 99.9% of harmful micro organisms (see attached for details). Just these two pieces of equipment cost was almost \$30,000, as example of the commitment we have to the situation.

Currently, only allowing 10 people to play per "room" and no league/team play has absolutely devastated our field rentals and bookings – we expect a decline of over 70% and large financial losses. Losses that are not continually sustainable and could result in complete bankruptcy and numerous job losses.

I would ask, based on the scientific information provided here and attached, and our dedication to maintaining a Covid free facility, that the York Region allow for indoor soccer play in large domed facilities to revert fully back to Stage 3 rules.

Ed Skrobal

President

Markham Sports Dome Inc.

Mount Joy Sports Dome Inc.



#### Gerald N. Catt, P. Eng. BDS GSC Consulting Engineer 7 Huffman Court, Vanessa, ON N0E 1V0 Tel: 519-446-2596 Fax: 519-446-2751

September 15, 2020

To whom it may concern.

When compared to conventional buildings, air supported structures have many advantages in preventing the spread of Covid-19.

The indoor air quality in Air Supported Structures resembles outdoor conditions. A typical dome contains 500,000 to 5,000,000 cubic feet of air. A normal 20' x 30' classroom contains 6,000 cubic feet of air.

Air Supported Structures have a typical fresh air turn over from 1.5 to 3 hours. 666,666 to 3,333,333 cubic feet of air per hour. The air holding up the Air Supported Structure is always escaping, requiring replacement outside air to continue holding up the structure.

Applying ASHRAE Standard 62.1-2016 Ventilation for Acceptable Indoor Air Quality, a conventional 20' x 20' classrooms are designed to 222 cfm of ventilation air. 13,320 cubic feet per hour. This is 10 cfm of air per person plus 0.12 cfm per square foot of floor area.

Air Supported Structures have a minimum of 50 times more outside fresh air. Thus, indoor air quality resembles that of the outside environment.

When compared to conventional buildings, Air Supported Structures have very low occupancy density. Typical classrooms have 1 student per 200 cubic feet of air. At a reduced occupancy of 20 students per classroom, there is 300 cubic feet or air for each student. Total Ventilation air provided, as per ASHRAE Standard 62.1, is about 11 cfm per person.

A typical Air Supported structure would have approximately 800 cfm of ventilation air per person at 6' social distancing.

Air Supported Structures are ideal indoor setting for preventing the spread of Covid-19.

Gerald Catt P. Eng. BDS. GSC

General Catt



## **GREENZAPR®**

The GreenZapr disinfects synthetic turf surfaces with powerful germicidal UVC lights. Harmful microorganisms such as MRSA, HIV, and influenza are eradicated through DNA destruction, eliminating the potential for "Super Bugs".

- Powerful Germicidal UVC Destroys 99.9% of Harmful Micro-Organisms
- Reliable On-Board Power
- Most Efficient, Cost-Effective Sanitation Technique

Reliable on-board power via generator or optional rechargeable gel cell batteries provide the most efficient, cost-effective sanitation method available in the industry.

The GreenZapr is built with the same high-quality fabrication people have grown to expect from GreensGroomer. Powered by a portable Honda generator or optional rechargeable gel cell, the UVC lamps are mated into two reflector modules. The standard 3-pass treatment places over 7,800µW/cm² of UVC energy on any given portion of the field — killing all harmful micro-organisms.

Compared to other sanitation techniques, the GreenZapr is the most efficient, most cost-effective method available to the industry.



#### **SPECIFICATIONS\***

Model	850, 850E
Main Frame	2 inch square tube (11 gauge) with 1-1/2 inch (10 gauge) square tube cross bars
Draw-bar	One piece 2 inch square tube
Length	108 inches
Width	84 inches
Weight	Model 850: 1,250 lbs. Model 851: 1,450 lbs.
Running Gear	4 pneumatic tires (16 x 650-8) Ribbed 2-ply with caged roller bearings and spanner bushing
Lift Mechanism	Hand crank with safety "position sensor"
Light Module	2 – 8 UVC light module w/ LED indicators and hour meter
UVC Bulb	Sixteen 36 watt slim line, hard quartz glass lamp envelope with FEP shatter-proof coating and waterproof sure seal lamp socket connection
Power Source	Model 850: 1000 watt Honda gas generator Model 850E: 4 deep cycle rechargeable gel-cell batteries with 1000 watt inverter/charger
Spring Tine Rake	42 – 3/16" diameter tines with 40° tip bend
Finish	Powder coat with 6-step pre-wash including de-greaser and anti-rust coating
Shipping Crate	116" x 82" x 42"
Crated Weight	1,995 lbs.

\*All measurements listed within the specifications are from the original design documents. Please confirm the accuracy of such measurements for your own benefit.

