



## Staff Report

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**Report To:** West Elgin Community Centre Board of Management

**From:** Jeff Slater Recreation Superintendent

**Date:** 2020-03-11

**Report:** 2020-01

**Subject:** Air Quality

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### **Recommendation:**

That West Community Center Board of Management hereby receives the report from Recreation Superintendent Jeff Slater re: Air Quality for information purposes and to provide staff direction as necessary.

### **Purpose:**

To provide background information regarding the resurfacer and emission testing and disseminate information regarding air monitoring at the West Elgin Arena.

### **Background:**

The resurfacer in use at the West Elgin Arena is a gas-powered unit. The emissions were tested on February 3, 2020 and the report is included in the report. The exhaust emissions are not far off of the original emission test completed in 2013. Included in the report is the Ontario Recreation Facilities Guideline for Indoor Air Quality in Arenas. There is no guideline for the low level or the high-level concentration of CO or NOx in Recreation Facilities. Having indicated that there are limitations in the Occupational Health and Safety Act, as well as responsibilities with respect the Occupiers Liability Act.

The West Elgin Arena has replaced our existing CO, NOx detector located within the resurfacer room with a Critical Environmental Technologies SCC (Self Contained Controller) that monitors CO as well as NOx gas levels.

The unit is equipped with a low-level alarm, ours is set at 25 ppm this will automatically activate the fan in the resurfacer room, and automatically open the fresh air louvers. The high-level Alarm will activate an audible alarm and activates at 100 ppm. Once this level is reached the building will be evacuated. Review of other facility procedures is being conducted and our procedure will be presented to the Board prior to the 2020 Season start up.

To facilitate the optimum efficiency of our resurfacer the Recreation staff are currently operating with a trial procedure in which the resurfacer is warmed up, under load for two minutes prior to the resurfacing operation. The Recreation staff have installed an exhaust port on the resurfacer door, the exhaust hose is attached to the exhaust pipe, placed through the exhaust port, which enables the exhaust emissions to escape the facility. The machine then is warm when the operators go onto the ice surface, all of the emission sensors are operational, thus reducing our CO input into the air at the arena. Part of this procedure also involves activating the exhaust fan for the time period when the machine is operating. The exhaust fan is set on a timer preventing the operation of the fan when it is not required.

To provide adequate air sampling to take place Recreation Staff are looking into the possibility of purchasing a multi gas detector, seminal to the fire departments, to allow us to test the air at any time. More information will be provided.

**Report Approval Details**

Document Title:	West Elgin Community Center Board of Management Indoor Air Quality.docx
Attachments:	
Final Approval Date:	Mar 4, 2020

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott