Keeping our Facilities Safe for Patrons and Members:

Answering Your Questions about Air Quality in our Center

Q. **Do the air exchange rates at the Mansfield Community Center (MCC) meet the state recommendation for gyms?**

A. **Yes. The State of Connecticut's guidelines have changed frequently, but MCC is in compliance with rules implemented by the State regarding reopening gyms during COVID-19.** The MCC's ventilation system was state-of-the-art when MCC opened in 2003 and we are confident it meets a high standard of safety for our visitors. Our ventilation system was set up to be Carbon Dioxide (CO2)-sensing in conjunction with an Alerton Automated Building System. The CO2 sensors, located in every public area of the facility, can detect the volume of people in a specific room and the generated CO2. The sensors then send a signal to increase outside air intake based on how many people are in the building and/or activity levels. Even during an idle or low-use time within our facility, there is a minimal air exchange set point. To increase fresh air into MCC, this baseline set point was increased when we reopened the MCC in June, and is set for optimization.

Q. **Does the MCC use HEPA filters on its air handling system? If not, why?**

A. **Fresh air circulation is one of the primary recommendations by the State for providing a safe environment. Not all fitness and pool facilities have as modern a system as we do.** Therefore, some facilities may focus more on changing filter design or installing portable HEPA filter systems. A HEPA filter was not called for in original facility design, as this would not be a typical setup for a recreation facility pre COVID-19.

The MCC air-handling units are not specifically designed to handle the extra force it would take to push air through HEPA filters Think of a window fan, for example. If you held a furnace filter in front of it , air flow would be impeded. Now do the same experiment, but tape five to ten of those filters together and see how much less air passes through. Installing a HEPA filtration system on top of our filtration system would have a similar effect.

Big fans on commercial units are optimally designed to push fresh air through heating and cooling coils outside and inside filters, duct work design, bends and angles inside the facility, and normal

duct work. The fans are engineered for limited restriction, and HEPA filters were not included in that initial calculation.

Therefore, even if we could retrofit HEPA filters onto our units, we could very well adversely affect our airflow and negatively affect our ability to adequately heat and cool, and provide ample fresh air inside.

A different type of filter, known as a Merv 13, is an option we have explored, but these systems are in high demand and back-ordered across the country. Additionally, we are continuously assessing the actual need and expense of modifying systems with the estimated benefits.

Q. **Can the air-handling units be modified to install and effectively use HEPA filters?**

A. **We consulted with the manufacturer of our ventilation system early on during COVID-19 and the recommendation was for us not to retrofit our system to add HEPA filters.** We are continuously assessing the actual need and expense of modifying systems with the estimated benefits.

Q. **If the circulation of fresh air is important to health and safety at MCC why are the windows not cracked open?**

A. While windows could sometimes be cracked open by staff as deemed appropriate, it's not optimal for the automated air handling units. **The air handling units make regular adjustments to temperature, humidity and CO 2 readings to allow more outside air to come into the facility.** In those times of the year when temperatures range during the day, staff would need to make the decision regarding the need to open windows. One criteria is when there are consistent temperatures between 40 to 70 degrees F outside.