

February XX, 2021

Superintendent Jack R. Smith, PhD
Montgomery County Public Schools
850 Hungerford Drive, Room 122
Rockville, Maryland 20850

Montgomery County Board of Education
850 Hungerford Drive, Room 123
Rockville, Maryland 20850

Via Email

Dear Superintendent Smith and Members of the Board,

On behalf of the MCCPTA Health and Wellness Committee, I am writing in response to MCPS' ongoing efforts to prepare schools for safer reopening during the COVID-19 pandemic. Our committee has met with Seth Adams, Director of the Department of Facilities Management (DFM), and his team to discuss their work to improve indoor air quality (IAQ) during the pandemic. We would like to thank MCPS for all their ongoing work to prepare schools for reopening. We also appreciate the DFM staff members making time to meet with our committee to discuss their progress in this area, answer our questions, and listen to our recommendations based on current, science-based guidelines. These are challenging times and as the science evolves, we are all continuing to learn more about improving IAQ in school environments.

The following recommendations are in alignment with MCCPTA's 2020-21 Advocacy Priorities under the heading of COVID-19 - *Prepare for a safe return to school buildings in the Covid-19 environment, guided by evidence-based, specific, and transparent criteria, including additional space, equipment and supplies that may be needed. Audit existing HVAC systems and update to increase ventilation and filtration in order to reduce exposure to COVID19.* These recommendations are intended to better protect the Equity and Learning Hubs already occupied by students and staff in addition to better protecting MCPS students, teachers, and staff as schools prepare for reopening and through the duration of the pandemic while open. These recommendations stand regardless of when schools reopen and are intended to guide safer operations.

The MCCPTA Health and Wellness committee proposes the following recommendations to support the Department of Facilities Management's (DFM) ongoing work to improve school IAQ and to reduce the risk of transmission, potential outbreaks, and school closures. Our proposal is based on current, evidence-based science to support MCPS' efforts moving forward as they prepare schools for a safer, successful reopening and for ongoing operations.

We propose consultation with a third-party, independent indoor air quality expert to advise and support the ongoing work of MCPS' DFM.

An IAQ expert with a PhD in mechanical or environmental engineering and extensive training in infectious disease control in public spaces would provide DFM with additional support in their ongoing IAQ mitigation efforts. Based on our recommendation, this expert would work alongside the DFM in two phases to help evaluate school buildings' IAQ on an ongoing basis to ensure the buildings are safer through the duration of the pandemic and beyond. The following recommendations are based on MCPS' own criteria as they state, "The American Society of Heating, Refrigeration and Air-Conditioning Engineers ([ASHRAE](#)), the Centers for Disease Control and Prevention ([CDC](#)), and the U.S. Environmental Protection Agency ([EPA](#)) continue to be our primary resources for information and guidance during the COVID-19 pandemic."¹ See attachment for details of Phase I and II of consultancy work:

- Phase I: Reassess HVAC scenarios after completion of DFM mitigation measures and rate them using a second diamond (or other approved) system
 - Consult with DFM to determine if additional, practical measures can be taken to bring schools up to current, science-based standards for ventilation and filtration based on [ASHRAE](#), [CDC](#), and [EPA](#) guidance as stipulated by MCPS.²
- Phase II: Exposure assessment to verify effective ventilation goals are met in-operation

Employing these above measures will ensure that airborne transmission of COVID-19 is reduced as school buildings reopen and operate.^{3 4} COVID-19 is transmitted primarily from person to person through airborne droplets and aerosols.⁵ Collaborating with an expert to establish and implement science-based measures integrating IAQ control strategies to reduce the risk of SARS CoV-2 infection in schools also has the added long-term benefits of improving MCPS students, staff, and teachers' physical environments, which promotes learning and overall health.⁶ Studies have shown that students' test scores increase with improved IAQ.⁷ These measures also help reduce the spread of other infectious diseases and minimizing absences.⁸ Thus, this immediate investment will have long-term benefits. MCPS has the opportunity to build more robust guidance to improve IAQ if these proposed measures to consult with an outside IAQ expert are

¹ <https://www.montgomeryschoolsmd.org/departments/facilities/default.aspx?id=674569>

² <https://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-reopening-schools-and-universities-c19-guidance.pdf>

³ Morawska, L., Tang, J.W., Bahnfleth, W., et al. (2020). *How can airborne transmission of COVID-19 indoors be minimised?* *Environment International*. 142(105832). Doi: [10.1016/j.envint.2020.105832](https://doi.org/10.1016/j.envint.2020.105832).

⁴ Miller, S.L., Nazaroff, W.W., Jimenez, J.L., Boerstra, A., Buonanno, G., Dancer, S.J., Kurnitski, J., Marr, L.C., Morawska, L., Noakes, C. (2020). *Transmission of SARS-CoV-2 by inhalation of respiratory aerosol in the Skagit Valley Chorale superspreading event*. *Indoor Air*. doi:10.1111/ina.12751.

⁵ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>

⁶ Zhang, J. (2020). *Integrating IAQ control strategies to reduce the risk of asymptomatic SARS CoV-2 infections in classrooms and open plan offices*, *Science and Technology for the Built Environment*. *Sci Technol Built Environ*. 26:(8),1013-1018, DOI: [10.1080/23744731.2020.1794499](https://doi.org/10.1080/23744731.2020.1794499).

⁷ EPA. Evidence from Scientific Literature about Improved Academic Performance.

<https://www.epa.gov/iaq-schools/evidence-scientific-literature-about-improved-academic-performance>

⁸ Ibid.

implemented. This action also demonstrates MCPS' good will, transparency, and a commitment to a safer physical environment that inspires the confidence and trust of all stakeholders.

In summary, by accepting our recommendation MCPS would be performing its due diligence to prioritize the safety, health, and welfare of students, staff, and teachers in school during and after the pandemic. This action would demonstrate MCPS' willingness to further protect our school community and the public's health.

Thank you for your consideration.

Sincerely,

/s/

Hannah Donart, MPH
Chair, Health and Wellness Committee
Chair, Environmental Health Subcommittee

cc: Cynthia Simonson, President, MCCPTA
MCCPTA Board of Directors MCCPTA Delegates

cc: Seth Adams, Director
Department of Facilities Management
Montgomery County Public Schools

cc: Christopher Lloyd, President
Montgomery County Education Association

cc: Pia Morrison, President
Service Employees International Union Local 500