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]

- 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
        - Review standards/metrics/policies that the DFM is employing and make recommendations where needed
        - Review isolation room ventilation designs for sick children or adults and make recommendations where needed
        - Assess additional ratings for portable classrooms
        - Confirm that schools are meeting the effective ACH goal of ≥ 5 ACH where possible, and the maximum effective ACH for the equipment otherwise
        - Ensure MCPS is using MERV 13 filters where possible, and the maximum rated for the equipment otherwise
        - Assess and revise criteria where needed for quantity and location of portable air filters
        - Work with DFM to enhance the public-facing facility data on the MCPS website, balancing transparency and the message for a lay audience (see attached MCPS school list 2021 - IAQ suggested spreadsheet)
- Phase II: Exposure assessment to verify effective ventilation goals are met in-operation.
    - Determine effective classroom ventilation rates from portable air filters (where applicable), MERV 13 HVAC supply air flow (where applicable), and CO_2 monitoring data in equity and learning hubs with spot-testing in each facility.
    - Scale up ventilation rate monitoring to other schools once airborne COVID19 mitigation measures are complete
    - Create an ongoing educational campaign where a consumer-grade CO_2 monitor can be used by teachers in every school as both a teaching tool with students (science, biology, math) and ventilation analysis to inform the DFM of any further mitigation measures needed and allow teachers to build confidence about their individual classroom ventilation and DFM actions

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