FINAL DRAFT

March XX, 2021

**Summary:**

COVID-19 is a respiratory illness, which makes it all the more important to reduce exposure to any type of respiratory irritant. Any chemical used indoors—cleaners, disinfectants, sanitizers etc affect indoor air quality. The use of safer products and following best practices helps improve indoor air, while minimizing toxins in the environment.

Thus, as a concerned parent and public health professional and with the support of [Healthy Schools Network](http://www.healthyschools.org/), [Children’s Environmental Health Network](https://cehn.org/) (CEHN), [Maryland Children's Environmental Health Coalition](http://mdcehc.org/) (MD CEHC), the [Collaborative on Health and the Environment](https://www.healthandenvironment.org/) (CHE), and the [Alliance of Nurses for Healthy Environments](https://envirn.org/) (ANHE) I am recommending safer products and practices in MCPS schools based on the most current science relevant to the COVID-19 pandemic and beyond.

* The EPA [Design for the Environment (DfE)](https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants) is the only agency that can certify disinfectants and sanitizers as safer for human health and the environment.
* The EPA recently updated the [(DfE)](https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants) website with a search function for those products also on the [List-N,](https://cfpub.epa.gov/giwiz/disinfectants/index.cfm) which are **EPA certified as effective against SARS-CoV-2 (COVID-19)**.
* In addition, the EPA’s List-N now has a search function for those approved products with safer active ingredients, including **hydrogen peroxide, L-lactic acid, alcohol ethanol or isopropanol, and citric acid**.
* Third-party certification marks like[UL Ecologo](https://www.ul.com/resources/ecologo-certification-program), [Green Seal](https://www.greenseal.org/certification?gclid=CjwKCAiAmrOBBhA0EiwArn3mfObxywhJT9aqzcddbLSYuKCg6TWF-NyMwC9PF-x6harrJ0gEPx_FiBoCf2EQAvD_BwE), or  [Cradle to Cradle](https://www.c2ccertified.org/) are general, all-purpose cleaning products that are recommended as [safer and are more environmentally friendly.](https://osha.washington.edu/sites/default/files/documents/Updated%20Safer%20Disinfectants%20List_March%2026%2C%202020.pdf) EPA also has an [EPA Safer Choice label](https://www.epa.gov/saferchoice) on some cleaning products.
* We also strongly urge that all facility personnel using these products receive specific training on product uses and processes. For example, surfaces to be disinfected must be cleaned first. Disinfectants all come with specific directions about “dwell time” and airing out before reoccupancy, as well as caution statements that they are not to be used around children. Facility personnel doing cleaning, sanitizing, and disinfecting should all be provided with appropriate PPE.

I am advocating that MCPS use only disinfectants with safer active ingredients including **hydrogen peroxide, L-lactic acid, alcohol ethanol or isopropanol, and citric acid** that appear **either on the EPA List-N or bear the DfE label**. In addition, by screening the EPA N-List for disinfectants with safer ingredients mentioned above the overall list of preferred safer disinfecting choices is expanded. I also recommend the use of general, all-purpose cleaners that are **third-party certified and without fragrances.** I am requesting that MCPS discontinues purchasing and using disinfectants that are known toxins and respiratory irritants, in addition to cleaning products with fragrances that can exacerbate asthma and respiratory problems.[1] I am also asking MCPS to follow best practices for cleaning to minimize risk of aerosolized toxins into the air and HVAC systems. Finally, I request listing all cleaning, disinfecting, and sanitizing products used in schools on MCPS’ website in one place and criteria for procurement clearly outlined to improve transparency.

These measures are especially important because they target protecting the most vulnerable populations in schools including children, women of childbearing age, those with asthma or other respiratory conditions, and workers at heightened occupational risk. Equity is another important factor in instituting these measures as those that suffer disproportionately from both respiratory illnesses and COVID-19 are largely from marginalized communities. “Black children are two times as likely to be hospitalized for asthma and are four times as likely to die from asthma as White children.”[2] The CDC also recognizes that, “Long-standing systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19.”[3]

* Cleaning and disinfecting products are associated in occupational health literature with new onset and exacerbations of asthma. To protect workers and to protect children from new onset asthma or exacerbations of breathing problems, it is critical to seek out and use safer products.
* Asthma is recognized as a federal disability and children and staff with asthma may be entitled to specific disability protection.
* Asthma is the leading cause of absenteeism and in returning all children to schools, it’s incumbent on school leadership to take every step to maximize children’s seat time and attendance.

Dear Superintendent Smith and Members of the Board,

I am writing this letter as a concerned parent and public health professional, with the support of [Healthy Schools Network](http://www.healthyschools.org/), [Children’s Environmental Health Network](https://cehn.org/) (CEHN), [Maryland Children's Environmental Health Coalition](http://mdcehc.org/) (MD CEHC), the [Collaborative on Health and the Environment](https://www.healthandenvironment.org/) (CHE), and the [Alliance of Nurses for Healthy Environments](https://envirn.org/) (ANHE). COVID-19 is mainly transmitted from person to person through airborne droplets and aerosols. The CDC and EPA recommend cleaning and disinfecting surfaces. However, cleaning and disinfecting products affect indoor air quality, and routine cleaning and disinfecting practices present the risk of chemicals being inhaled, absorbed through the skin, or swallowed.[4] With increased cleaning and disinfecting of surfaces, environmental health experts and pediatric specialists recommend using safer products and practices to reduce the risk of harmful chemical exposures via inhalation, dermal contact, and ingestion during and after the COVID-19 pandemic.[5] [6] [7] The use of safer, greener products reduces pollutants in the indoor air and on surfaces.

Consistent with MD state law on green cleaning (as amended 2012), [MCPS’ 2018 Green Cleaning Plan](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/1032.18_2018GreenCleaning_BROCHURE_web.pdf) specifically states:

The plan documents the school system’s commitment to purchasing and using cleaning and grounds-care products and methods that reduce adverse impacts on public health and the environment. Cleaning methods set forth herein emphasize the removal of indoor pollutants, including soils, particulates, microbes, and the like, while maintaining a safe and healthy environment for all students, workers, and other building occupants. [8]

Thus, I am forwarding the specific recommendations for disinfecting products which 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. Ensure a healthy physical environment for students in facilities and buses, providing spaces which are comfortable, safe and not overcrowded.*

I recommend that the [MCPS’ 2018 Green Cleaning Plan](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/1032.18_2018GreenCleaning_BROCHURE_web.pdf) be updated to follow current, science-based best practices to mitigate both harmful chemical and biological exposures during and after the COVID-19 pandemic. Specifically, the [MCPS’ 2018 Green Cleaning Plan](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/1032.18_2018GreenCleaning_BROCHURE_web.pdf) should follow the guidelines of the [American Academy of Pediatrics](https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/) and the leadership of states such as [California](https://files.covid19.ca.gov/pdf/guidance-schools.pdf) and [Washington](https://www.k12.wa.us/sites/default/files/public/workgroups/Reopening%20Washington%20Schools%202020%20Planning%20Guide.pdf) that recommend using cleaning, sanitizing, and disinfecting products that are [safer for humans and the environment](https://osha.washington.edu/sites/default/files/documents/Updated%20Safer%20Disinfectants%20List_March%2026%2C%202020.pdf). I recommend the following with the support of [Healthy Schools Network](http://www.healthyschools.org/), [Children’s Environmental Health Network](https://cehn.org/) (CEHN), [Maryland Children's Environmental Health Coalition](http://mdcehc.org/) (MD CEHC), the [Collaborative on Health and the Environment](https://www.healthandenvironment.org/) (CHE), and the [Alliance of Nurses for Healthy Environments](https://envirn.org/) (ANHE):

1. Require that all MCPS SPO approved cleaning and disinfecting products be [**safer for humans and the environment**](https://osha.washington.edu/sites/default/files/documents/Updated%20Safer%20Disinfectants%20List_March%2026%2C%202020.pdf) and only use disinfectants with one or more of the safer active antimicrobial ingredients per the EPA’s DfE list (**hydrogen peroxide, L-lactic acid, alcohol ethanol or isopropanol, and citric acid)** culling of EPA’s N list:
	1. **Disinfectants:** To deactivate the SARS CoV-2 virus that causes COVID-19 the disease, only antimicrobial disinfectants on EPA’s N list should be used. Those products with fewer health and environmentally adverse impacts found on the EPA’s [DfE list](https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants) will have one or more of these active ingredients: (**hydrogen peroxide, L-lactic acid, alcohol ethanol or isopropanol, and citric acid).** They are listed as less-hazardous ingredients and preferred by [Green Seal](https://www.greenseal.org/certification?gclid=CjwKCAiAmrOBBhA0EiwArn3mfObxywhJT9aqzcddbLSYuKCg6TWF-NyMwC9PF-x6harrJ0gEPx_FiBoCf2EQAvD_BwE) and the [Responsible Purchasing Network](https://osha.washington.edu/sites/default/files/documents/Updated%20Safer%20Disinfectants%20List_March%2026%2C%202020.pdf).Products with safer active ingredients are less toxic, are not strong respiratory irritants or asthma triggers, and have no known carcinogenic, reproductive, or developmental effects.[9]
	2. **Cleaning products:** Third-party [UL Ecologo](https://www.ul.com/resources/ecologo-certification-program), [Green Seal](https://www.greenseal.org/certification?gclid=CjwKCAiAmrOBBhA0EiwArn3mfObxywhJT9aqzcddbLSYuKCg6TWF-NyMwC9PF-x6harrJ0gEPx_FiBoCf2EQAvD_BwE), or  [Cradle to Cradle](https://www.c2ccertified.org/) ([Silver level or higher](https://www.c2ccertified.org/products/registry)) **without fragrances**. EPA also has a [EPA Safer Choice label](https://www.epa.gov/saferchoice) on some cleaning products.
	3. Create a master list of all cleaners, sanitizers, disinfectants, hand sanitizers, and hand soaps used in schools on MCPS’ website in one place and include clearly outlined criteria for procurement to improve transparency.
2. Do not commit to any new purchases that are not consistent with these science-based recommendations. And further, it is our expectation that district policy would seek to eliminate any products inconsistent with the above recommendations. That would include the following. products from the lists ofapproved products for use within MCPS facilities posted [here](https://www.montgomeryschoolsmd.org/departments/facilities/safety/covid.aspx#facilitycleaning) and [here](https://www.montgomeryschoolsmd.org/departments/facilities/schoolplantops/data-sheets.aspx):
	1. Quaternary ammonia (quats): Products with quats are skin and throat irritants, and have been linked to reproductive harm in animal studies.[10] [11] [3M Quat Disinfectant, Cleaner](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/3M%20Quat%20Disinfectant%20Cleaner.pdf), [Solimo Disinfecting Wipes](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/SDS%20Solimo%20wipes.pdf), [Lysol Brand II Disinfecting Wipes](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/SDS%20Lysol%20Brand%20II%20wipes.pdf), [Sanidry Disinfecting Wipes](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/SDS%20SANIDRY%20-%20Disinfecting%20Wipes.pdf), [Clear Gear](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/SDS%20Clear%20Gear.pdf), and [Vital Oxide](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/SDS%20Vital%20Oxide.pdf) are currently on MCPS’ list of approved products.[12]
	2. Bleach (sodium hypochlorite): Products with bleach can cause acute eye, throat and skin irritant, and causes and triggers asthma.[13] [Bleach](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/BLEACH.pdf) is currently on MCPS’s list of approved products.[14]
	3. Products with fragrances: Fragrances are a common asthma trigger.[15][Spic and Span, Disinfecting All-Purpose Spray and Glass Cleaner](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/SDS%20SPIC_AND_SPAN_DISINFECTING_ALL-PURPOSE_SPRAY_AND_GLASS_CLEANER.pdf), [3M Neutral Cleaner Concentrate](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/3M%20Neutral%20Cleaner%20Concentrate.pdf) and [3M 8L General Purpose Cleaner](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/3M%208L%20General%20Purpose%20Cleaner%20SDS.pdf) currently on MCPS’ list of approved products, contain added fragrance.[16]
	4. Hand sanitizers that are on the [FDA’s do-not-use hand sanitizer list](https://www.fda.gov/consumers/consumer-updates/your-hand-sanitizer-fdas-list-products-you-should-not-use). See: [CDC health advisory: Serious Health Problems caused by hand sanitizer containing methanol](https://www.cdc.gov/handwashing/index.html)
	5. [Aerogreen Antibacterial Foam Soap](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/AeroGreen_Anitbacterial_Foam_Soap.pdf) from all school inventories as MCPS has recently removed it from their list of approved products to come into compliance with the 2016 FDA ban on triclosan.
3. Implement safer cleaning, sanitizing, and disinfecting practices:
	1. Per the [AAP](https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/) recommendations, “In general, elimination of high-touch surfaces is preferable to frequent cleaning. For example, classroom doors can be left open rather than having students open the door when entering and leaving the classroom, or the door can be closed once all students have entered followed by hand sanitizing.”
	2. Per [AAP](https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/) recommendations, “Children should not be present when disinfectants are in use and should not participate in disinfecting activities.” MCCPTA requests that children also not be present or involved in the use of cleaning products beyond third-party certified approved fragrance free soap and water.
	3. Remove electrostatic sprayers from inventory and use. The MCPS Green Cleaning plan states in the “Product Selection” criteria that MCPS will “Minimize use of aerosol products.”[17] [Dr. Stephani Holm, Co-Director of the Western States Pediatric Environmental Health Unit warn](https://www.healthandenvironment.org/webinars/96527)s (time [50:00](https://www.healthandenvironment.org/webinars/96527)) that the harm from potential inhalation and adverse impact on air quality while using these devices may outweigh the benefits.[18] The purpose of fogging is to apply the disinfectant to surface in a rapid manner, but cleaning before disinfecting is required so that a soiled surface does not deactivate the disinfectant and the time saved may be minimal. [19] Furthermore, applying the disinfectants with a fogger enhances the negative effects on indoor air chemistry. Due to air chemistry concerns, rooms should be vented after fogging (30 minutes to 90 minutes depending on the outdoor air change rate) further impacting any saved time from fogging. There has been no research looking at safety of these devices long-term when people are present or return shortly after application. Studies comparing the efficacy of the spray technology with alternative manual application of disinfectant in school settings are needed.
	4. Visible mold should be addressed with standard safe practices according to the [EPA](https://www.epa.gov/mold/mold-remediation-schools-and-commercial-buildings-guide-chapter-1) and [NIOSH](https://www.cdc.gov/niosh/updates/upd-12-11-18.html). Sources of mold should be addressed as soon as possible to minimize disinfectants.[20]
	5. Buses should be ventilated during and after disinfecting to remove disinfectants in the gas phase. During operation, buses should have two windows partially open in front and back to minimize airborne transmission of viruses when students and staff are present.
4. Handwashing:
	1. Per [AAP](https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/) recommendations, “Frequent handwashing as a modality of containment is vital.” MCPS established guidelines and implementation of regular hand washing routines throughout the day, but especially after using the bathroom, before and after lunch, and before and after recess. Hand sanitizer should not be used in place of handwashing, but only if access to soap and water is not available. Additional portable handwashing stations should be considered if handwashing facility access is limited.

As COVID-19 has led to an increase in disinfecting and handwashing, repeated use of these chemicals could have harmful health consequences for both cleaning staff, teachers, and students. Especially in the face of the Covid-19 pandemic, it is imperative to minimize known risks to the health of students, teachers, and staff. Finally, the revised Green Cleaning Plan should be a working document that is updated as the science on safer cleaning and disinfecting evolves and as new products are considered for purchase.

Thank you for your consideration.

Sincerely,

 /s/

Hannah Donart, MPH

Montgomery County Public School Parent

Claire L. Barnett, MBA

Healthy Schools Network

Nsedu Obot Withrspoon, MPH

Executive Director

Children's Environmental Health Network (CEHN)

Veronika Carella, Legislative Director

Maryland Children's Environmental Health Coalition (MD CEHC)

Karen Wang, Director

Collaborative on Health and the Environment (CHE)

Katie Huffling, MS, RN, CNM, FAAN

Executive Director

Alliance of Nurses for Healthy Environments

cc: Cynthia Simonson, President, MCCPTA

MCCPTA Board of Directors

cc: Monifa McKnight, Deputy Superintendent

Montgomery County Public Schools

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

[1]https://www.cdc.gov/asthma/triggers.html?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fasthma%2Freduce\_triggers.html

[2] https://www.epa.gov/sites/production/files/2014-05/documents/hd\_aa\_asthma.pdf

[3] https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html

[4] https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

[5]https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/

[6] https://wspehsu.ucsf.edu/wp-content/uploads/2020/04/safer\_disinfect\_fxsht\_0405.pdf

[7]Holm, S.M., et al (2019). [“Do we know how best to disinfect child care sites in the United States? A review of available disinfectant efficacy data and health risks of the major disinfectant classes](https://wspehsu.ucsf.edu/wp-content/uploads/2019/12/do-we-know-how-best-to-disinfect-child-care-sites-in-the-united-states.pdf).” *Am J Infect Control.* 47(1):82-91.

[8]https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/1032.18\_2018GreenCleaning\_BROCHURE\_web.pdf

[9] https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants

[10]https://www.cdc.gov/asthma/triggers.html?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fasthma%2Freduce\_triggers.html

[11]https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/

[12] https://www.montgomeryschoolsmd.org/departments/facilities/schoolplantops/data-sheets.aspx

[13]https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/

[14] https://www.montgomeryschoolsmd.org/departments/facilities/schoolplantops/data-sheets.aspx

[15]https://www.cdc.gov/asthma/triggers.html?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fasthma%2Freduce\_triggers.html

[16] https://www.montgomeryschoolsmd.org/departments/facilities/schoolplantops/data-sheets.aspx

[17]https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/schoolplantops/1032.18\_2018GreenCleaning\_BROCHURE\_web.pdf

[18] https://www.eenews.net/stories/1063709823

[19] https://www.healthandenvironment.org/webinars/96527

[20] https://www.epa.gov/mold/mold-remediation-schools-and-commercial-buildings-guide-chapter-1