SUPREME COURT OF THE STATE OF NEW YOI COUNTY OF NEW YORK		
In the Matter of the Application of	:	
THE PROFESSIONAL STAFF CONGRESS/CUNY.	: : :	Index No:
Petitioner,	: :	muca no.
- against -	: :	
THE CITY UNIVERSITY OF NEW YORK,	:	
Respondent.	· :	

AFFIDAVIT OF JEAN GRASSMAN

AFFIDAVIT OF JEAN GRASSMAN

STATE OF NEW YORK	}
	} ss.
COUNTY OF NEW YORK	}

Jean Grassman, being of full age and duly sworn, affirms as follows:

- 1. I make this affidavit in support of The Professional Staff
 Congress/CUNY's ("PSC") Petition (the "Petition") pursuant to Article 78 of the Civil Practice
 Law and Rules ("CPLR"), in support of its Verified Petition in the nature of mandamus to
 compel, and in support of its application for a temporary restraining order and a preliminary
 injunction.
- 2. I am an Associate Professor at the CUNY Graduate Center School of Public Health and Health Policy. I received my PhD in Environmental Health Sciences from University of California, Berkeley. Among my areas of study are occupational/environmental health and toxicology. I am the Coordinator of the PSC Health and Safety Committee. In my role as Coordinator of the PSC Health and Safety Committee I have had significant involvement with issues at the Hunter College Campus Schools ("HCCS") over the past year.
- 3. The HCCS building is located at 94th Street on the East Side of Manhattan and is colloquially known as the "brick prison." The hallways in the 94th Street Building are on the perimeter of the building with windows and the classrooms on the interior. Most classrooms have few if any windows, and in the where there are windows they do not open.
- 4. Moreover, for years the school operated with an inadequate and under construction HVAC system. As of last year, 40 out of a total of 87 HVAC unit ventilators

needed to be repaired in the system in order (even pre-pandemic) to achieve proper fresh air flow to the student occupied spaces.

- 5. On February 28, 2020 I participated in a joint walkthrough involving representatives from the PSC and the CUNY Administration. The purpose was to observe conditions associated with boiler and chiller plant replacement and with health symptoms experienced by PSC members. At this time there were not any COVID-19 issues addressed.
- 6. It is my understanding that on August 12, 2020 Hunter put the "Hunter College Campus Schools K-12 Reopening Plan" (the "Plan") on its website. PSC did not get confirmation from Hunter that the Plan was the final version of the mandated reopening plan until September 2020. A copy of the Plan is attached hereto as Exhibit A.
- 7. The Plan provides that teachers and students in Grades 4-6 will return four days per week for full day instruction and Grades 7-8 will return for 2-3 days per week for inperson instruction.
- 8. The Plan states that one of the first steps HCCS must take is for "portable high-efficiency particulate arrestance (HEPA) air filtration units will be installed in classrooms which have ventilation systems that use recirculated air."
- 9. This provision of the Plan was critical because of the serious and unfixable problems with air circulation and ventilation at HCCS. The American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE"), which is the authoritative source for COVID-19 HVAC / air filtration guidance states that in rooms where Minimum Efficiency Reporting Value ("MERV") 13 Filters cannot be used, such as HCCS, schools should have, in each classroom, HEPA filters that recirculate air within a space at a minimum of two times per hour. https://www.ashrae.org/technical-resources/reopening-of-schools-and-universities

This is because ASHRAE has concluded that "HEPA filters are more that 99.97% efficient at capturing airborne viral particles associated with SARS-CoV-2."

https://www.ashrae.org/technical-resources/filtration-and-disinfection-faq (last visited Sept. 16, 2020).

- 10. On September 14, 2020 I was informed by the faculty at HCCS that the required HEPA filters had not been installed at HCCS. Instead, photochemical oxidizers were installed in the classrooms.
- 11. The devices HCCS put in the classrooms are not filters. They are air purifiers that are supposed to work by sending free radicals and ozone into the air to "purify" it *rather* than filter the air. The model CUNY purchased is the Greentech Environmental PureAir 3000. Greentech appears to be a small company based out of Johnson City, Tennessee. https://www.greentechenv.com/product/pureair-3000-whole-home-purifier/.
- 12. On September 16, PSC corresponded with a representative of Greentech, who confirmed that "No," it is not a HEPA filter, and is not a filter at all, it is "an active air purifier, not a filter." The representative stated that the device works by "generating active cleaning 'agents' that are propelled into the environment to seek out and destroy air pollutants, rather than requiring them to have to migrate to a filter and be trapped there." Email of Gilana Reiss attached hereto as Exhibit B.
- 13. HEPA filters have been widely studied and proven effective to destroy airborne viruses. ASHRAE has concluded that "HEPA filters are more that 99.97% efficient at capturing airborne viral particles associated with SARS-CoV-2." https://www.ashrae.org/technical-resources/filtration-and-disinfection-faq (last visited Sept. 16, 2020).

- 14. ASHRAE standards and guidelines for schools recommends the use of HEPA filters where, like here, MERV13 filters cannot be used. These authoritative protocols recommend that schools "[p]rovide a HEPA filtration unit which re-circulates air within the space," that the school provide "portable, all electric HEPA/UV Machines in each classroom," and that it re-circulates a minimum of two times per hour.
- 15. By contrast, the technology used by the PureAir 3000 has not been widely studied and proven to be effective at virus destruction. Nor is it recommended by ASHRAE. PSC is unaware of *any* studies conducted as to its effectiveness at preventing the spread of COVID-19. Nor have any studies been conducted to show that the hydrogen peroxide, hydroxyl groups and superoxide generated by PureAir 3000 are safe to humans, although the Company did cite *one* study of the technology used in the device by Kansas State University.
- 16. That study was a 13-year-old article which tests the efficacy of a similar technology against bacteria and fungi on polished steel surfaces. The study does not even attempt to address whether the technology is able to neutralize airborne viruses.
- 17. With respect to ventilation, the Plan states that Hunter "shall increase ventilation with outdoor air to the greatest extent possible while maintaining health and safety protocols, particularly for younger students." *Id.* at 17.
- 18. The Plan also asserts that HCCS has "modified buildings' ventilation systems to maximize the use of outside air and reduce the amount of recirculated air to the extent that we can maintain reasonable building comfort levels." *Id*.
- 19. The Plan further obligates HCCS to install "portable high-efficiency particulate arrestance (HEPA) air filtration units . . . in classrooms which have ventilation systems that use recirculated air."

- 20. The Plan similarly states on its second page that Hunter will "install HEPA filters in each classroom." *Id.* at 1.
- 21. In September, the Hunter Administration informed the PSC that the upgrades to the HVAC and ventilation systems were completed. In response to the PSC's ongoing call for an inspection of the systems Hunter provided a report it claimed verified that the building was safe. The report is attached hereto as Exhibit C.
- 22. The PSC noted that the report was produced by the company that had performed the installation and repair of the systems. Therefore, the PSC retained its own expert, EOHS Associates, to review the report and provide an analysis. The report is attached hereto as Exhibit D.
- 23. The EOHS Associates report noted that the Genesys report was flawed or incomplete in several areas. "Most significantly, the provided documents contain not a single reference to the ongoing SARS-CoV-2 pandemic. The documents provide no indication of whether the Genesys/Trane work comprises the full range of ventilation modifications that HCCS will be utilizing to minimize virus transmission in the indoor environment or whether additional ventilation changes are planned for this purpose."
- 24. In addition, EOHS Associates noted that "Per the Genesys air balance report, ventilation goals for HCCS classrooms were based on the assumption of the presence of "clean" Class 1 air. This would have been technically correct in normal circumstances.

However, the assumption of clean classroom air is not valid in the context of the current pandemic situation. Compliance with ASHRAE 62.1 guidance for ventilation for classroom air does not provide adequate for protection human health in the COVID-19 context

and must be supplemented by additional protective ventilation measures as well as by other measures."

- 25. On September 12, 2020 EOHS issued a Supplemental Report analyzing the HCCS Reopening Plan regarding ventilation issues only. That analysis found that "The ability to maximize provision of outdoor air supply is compromised by the current deficient performance of 6 of the 7 centralized HVAC systems, as documented in the Genesys Final Balancing Report."
- 26. The inability of the 94 Street building to adequately provide outside air to the ventilation system makes the failure to install the mandated HEPA filters even more dangerous to the health and safety of people in the building.

Sworn to before me this 17th day of September, 2020

Jean Grassman

STATE OF NEW YORK

NOTARY SITUATED IN THE COUNTY OF NEW YORK

Pursuant to Governor Andrew Cuomo's Executive Order 202.7 and the extensions thereof, I attest that on this 17th day of September, Jean Grassman appeared before me by live audio-video technology, proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to this instrument, affirmatively represented that she was physically situated in the County of New York, NY, by his/her signature executed the same in her capacity, and sent a true electronic copy of the same signed, executed instrument to me in the County of New York, NY.

[NAME OF NOTARY]

TARA KESCHINGER
Notary Public, State of New York
No. 01KE6173584
Qualified in Nassau County
Commission Expires 1011127

Notary Public State of New York

Qualified in New York County

Notary Registration No. 0(1/6/1/3/3)

Notary Commission Valid to 10/1/1/2/3