

**Office of Facilities Planning, New York State Education Department August 21, 2020
COVID-19 Reopening Guidance – Facilities Issues Clarifications**

1. FAQ No. 12. (Revised)

Can we install ion generators or UV light technology in air handling units (AHUs), portable units, or lighting?

Bipolar ionization(BPI), needle point bipolar ionization (NBPI), ion generators, corona discharge technology can generate ozone, formaldehyde and ultrafine particles from reactions with volatile organic compounds (VOCs). For this reason, SED working with Department of Health is not recommending it at this time. Such technology is being marketed heavily; please be cautious – the marketing literature does not discuss the byproducts of ionization.

UV light is permitted only in central system air handling units (AHUs) and for lighting in spaces, such as the nurse's office or isolation room, for use only when the space is unoccupied, and only with appropriate safety measures (eg. safety switches that automatically turn off the UV light when an AHU access door is opened or when occupants are sensed entering a space) that would prevent unintended UV light exposure to workers. Students and staff shall not be exposed to UV, UV-A, UV-B, UV-C, Far-UVC, or any UV light due to the known risk of damage to eyes and skin. Hence, UV lights in spaces (not AHUs) shall not be permitted to operate when the space is occupied. For more information, please see link to FDA

guidance: <https://www.fda.gov/medical-devices/coronavirus-covid-19-and-medical-devices/uv-lights-and-lamps-ultraviolet-c-radiation-disinfection-and-coronavirus>

Chapters in ASHRAE Handbook

- 2019 Applications - Chapter 62: ULTRAVIOLET AIR AND SURFACE TREATMENT https://www.ashrae.org/file%20library/technical%20resources/covid-19/i-p_a19_ch62_uvairandsurfacetreatment.pdf
- 2016 Systems and Equipment - Chapter 17: ULTRAVIOLET LAMP SYSTEMS https://www.ashrae.org/file%20library/technical%20resources/covid-19/i-p_s16_ch17.pdf
- ASHRAE Journal article: Ultraviolet Germicidal Irradiation - Current Best Practices (2008, Martin et al) <https://www.ashrae.org/file%20library/technical%20resources/covid-19/martin.pdf>

For upper room systems – NIOSH guidelines

(2009) <https://www.cdc.gov/niosh/docs/2009-105/default.html>

2. Are portable fans, window air conditioners, portable air cleaners allowed?

Portable fans, window air conditioners, portable air cleaners, etc. shall be listed and labeled for its intended use by a nationally recognized testing laboratory (NRTL) such as UL or ETL. They shall not impede the means of egress to exit doors or access to rescue windows. The minimum code required ventilation shall not be adversely impacted by the installation or operation of the portable equipment (eg. closing natural ventilation windows to run a recirculating window air conditioner, thus preventing required outside air ventilation from enter the space). It is local (school board) decision to allow these to be brought in to classrooms or not to allow them.

Using fans and window air conditioners may present its own circumstances with respect to its effects on spread of air contaminants in the space. We encourage staff to work with their building/facilities management and school administration to address heat mitigation in classrooms.

Portable air cleaners can be loud hence may not be suitable in a classroom learning environment.

Please note – any alternative air/surface cleaning equipment is a supplement. Schools are still required to perform cleaning and disinfection according to CDC/EPA and DOH guidelines:

- https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/Reopening_America_Guidance.pdf (page 5)
- https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/P12_EDU_Summary_Guidelines.pdf (page 3)
- <https://coronavirus.health.ny.gov/system/files/documents/2020/03/covid-19-p-12-school-guidance-03092020.pdf> (page 5)