December 14, 2021

Statement Regarding Ionization Air Cleaners

SED, in consultation with the Department of Health, would like to bring to your attention our concerns regarding ionization technology and reasons why we do not recommend it. Our concerns center around the potential for these devices to generate byproducts such as ions, fine particles and reactive chemicals that would likely decrease indoor air quality and may present a health risk to students and staff. Unfortunately, we have found that there is not always adequate documentation to show that these devices are safe and effective and meet manufacturer claims.

- Our concerns are shared by the National Institute for Environmental Health and Safety (NIEHS) which states:
  - “Select a unit that DOES NOT include ultraviolet irradiation, ozone generators, or other disinfection features. These extra features may pose a health hazard to building occupants and provide little added benefit to air cleaning.”
- EPA, CDC, NIEHS and the Alfred P. Sloan Foundation are sponsoring the National Academies of Sciences, Engineering and Medicine (NASEM) for a 2-year study of Indoor Chemistry: [https://www.nationalacademies.org/our-work/emerging-science-on-indoor-chemistry](https://www.nationalacademies.org/our-work/emerging-science-on-indoor-chemistry)
- Technical paper documenting the potential for an ionization device to degrade indoor air quality, entitled “Changes in IAQ Caused By Corona Discharge Air Cleaner”, published in ASHRAE Journal Volume 60, Number 12, December 2018, pages 64-72 (search by the title; requires a subscription to download): [https://technologyportal.ashrae.org/Journal/ArticleDetail/2367](https://technologyportal.ashrae.org/Journal/ArticleDetail/2367)

We understand that the marketing associated with such products can be influential. However, as stated above, the marketing claims typically are not well documented. SED and DOH continue to review current studies and independent testing of this technology and will advise school districts of any new information.

From DOH - These links are excellent resources for discussions about ionizing air cleaners:
- [https://aaarpubs.org/articles/ast-articles-summer-2021/](https://aaarpubs.org/articles/ast-articles-summer-2021/)


We ask that you please refrain from applying ionization technology until further independent studies show that a particular manufacturer’s product will not generate harmful byproducts. We recommend installing high efficiency air filters (MERV 13 or better), and/or increasing ventilation, as a proven and safe method for removing pathogens and other contaminants with the HVAC system.