

Eastwood purchases air-purification system

- By Marie Thomas-Baird, Sentinel-Tribune Education Editor
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File photo. Eastwood High School.
Photo by J.D. Pooley/Sentinel-Tribune

PEMBERVILLE – Eastwood Local Schools is purchasing an air purification system to zap any bad pathogens in an effort to keep students safe.

At Monday's school board meeting, members gave Superintendent Brent Welker approval to purchase the system from Global Plasma Solutions without going out to bid.

Kris Wagoner, director of operations, called the system needlepoint bipolarization.

"It is a pretty impressive system," he told the board.

Wagoner said he came across the system while looking for UV lights to kill bacteria. The need arose as schools plan to reopen this fall amidst coronavirus. He found other agencies, like Ohio State University and the White House, used a system like this.

He said that as air runs across an electric field made of carbon fiber – that’s why it’s called needlepoint – the air is ionized into positive and negative.

“All it does is strips everything back to neutral polarity,” Wagoner said.

If a negative ion – for example, a dust particle or pathogen — is in the air, a positive ion is attracted to it and removes the hydrogen molecule so it can’t survive.

“It’s a great big bug zapper only on a molecular level,” Wagoner said.

If germs or even dust particles are coming out of the carpet in a room, the system will kill it as the air is circulated back through the system, he said.

Welker said the continuous concerns about COVID-19 prompted the search, but that is will be available during flu season and the next pandemic such as has been seen in the past with SARS and MERS.

“Having the system will really be helpful going forward,” he said. The one-time cost is \$60,000 and there will be zero maintenance, Wagoner said.

Money from the Coronavirus Aid, Relief, and Economic Security Act which will cover the cost of the system.

It will be installed in each of the four air handlers in the elementary school. The building is a perfect fit, Wagoner said, because it has a closed air-circulation system.

He compared it to most homes where the furnace recirculates the same air.

Adding the system to the high school or middle school would cost three times as much, Wagoner said, since their systems both bring in a lot of outside air.

“The buildings are not made for that kind system, and I’d hate to see anybody put that kind of money in a 50-year-old building,” he said.

Wagoner said there is a 30-minute turnover of air in the room and 99.4% kill rate.

"This isn't just something for this year," Welker said. "This is something that's going to pay dividends and returns through flu season."