

State bans in-home ozone air purifiers, citing health risks

template_bas

The California Air Resources Board says the regulation, which takes effect in 2009, is the first of its kind in the nation.

By Janet Wilson, Los Angeles Times Staff Writer
September 28, 2007

The California Air Resources Board on Thursday banned popular in-home ozone air purifiers, saying studies have found that they can worsen conditions such as asthma that marketers claim they help to prevent.

The regulation, which the board said is the first of its kind in the nation, will require testing and certification of all types of air purifiers. Any that emit more than a tiny amount of ozone will have to be pulled from the California market.

An estimated 2% of the state's households have one of the so-called ozone air purifiers, according to air board staff research, and the staff estimated that more than 500,000 people had been exposed to levels of ozone above federally recognized health standards as a result. More than 2 million California residents have some sort of air purifier, and other types can be safe and effective, the air board staff said.

"This is a landmark decision," said Mary Nichols, chairwoman of the Air Resources Board.

"State government needed to set up [its] own standards on air purifiers because many [marketers] indeed are deceiving the public," said former Assemblywoman Fran Pavley, who sponsored a law requiring the board to rein in so-called ozone generators. "There are reports of ozone being generated in someone's living room . . . at levels equivalent to having a Stage 1 smog alert right in your own house."

The new regulation, which takes effect in 2009, will exempt industrial and commercial uses of ozone generators, as long as people are not present.

The machines deliberately inject ozone into a living room or bedroom, or directly into nasal passages via a personal breathing device worn around the neck. They have been marketed on the radio and over the Internet for years under brand names such as Living Air Purifier, Mountain Air or Fresh Air.

The companies also employ direct marketing, in which salespeople who say they are satisfied consumers go door-to-door or advertise the products to friends and colleagues, then earn a commission for each unit sold.

Many direct marketers spoke at the air board's public hearing Thursday in Diamond Bar. Most, however, identified themselves not as salespeople but as consumers who said their own health, that of asthmatic children, their aging parents and even depressed pets had been dramatically improved after use of ozone purifiers sold by EcoQuest, a Tennessee-based company.

"God gave humans these air purifiers, and you should not take away that gift," said Debra Perkins of Corona, weeping as she told how she felt the product had improved her mother's breathing.

Perkins said later that she was speaking not because she sells the devices, but because she believed so strongly as a registered nurse that they had helped her and her family. She said she first became a distributor after seeing them displayed at the Los Angeles County Fair. She could not afford the \$700 price, but was told she could get them at reduced cost if she sold them.

Allen Johnston of EcoQuest said his company was not allowed under Food and Drug Administration laws to make claims that the product cured illnesses or eliminated germs of any kind, and it doesn't.

But he said studies had shown that injecting some ozone into homes could reduce levels of germs.

"Ozone is both safe and effective, and widely endorsed by safety organizations," he said.

Such claims are false, said UC Irvine inhalation toxicologist Michael Kleinman. "Ozone is a toxic contaminant, and does cause significant adverse health impacts," he said.

"There are thousands of peer-review studies showing ozone is dangerous," said Bonnie Holmes-Gen of the American Lung Assn. of California, who for years led the drive for regulation.

Those studies have linked ozone exposure to increased asthma and other potentially deadly respiratory diseases, permanent lung damage and other health problems. Outdoor ozone produces smog when it reacts with sunlight.

But Johnston, of EcoQuest, said the studies used by the air board staff and conducted by scientists relied on outdoor ozone exposure, or testing conducted in sterile, small chambers that would automatically produce much higher levels of ozone than in a normal, larger home. After Thursday's unanimous vote by the board to ban high-ozone generators, he said, "I feel sad for the people of California."

Johnston said that his company would "of course comply" with the new regulation, and that it has other products that it will be able to sell here instead. He said California is the company's largest market, both because of its large population and its significant air pollution problems.

He said manufacturers could have done a better job of placing warning labels on devices advising the public not to set the level of the machine too high when anyone is in the room, but added that such limitations are spelled out in the owner's manual.

Sharper Image, another leading manufacturer and marketer of indoor air purifiers, has been working with the air board staff for more than a year to develop a new air purifier that will meet state standards, said Peggy Jenkins, head of the board's indoor air division.

Jenkins said her office routinely receives calls from frightened consumers who have experienced asthma attacks or other health problems that could have been caused by ozone air purifiers. Sharper Image did not return calls seeking comment.

There are safe and effective air purifiers, Jenkins said. The cheapest, and usually the most effective, are so-called HEPA devices also commonly used in hospitals. They do require maintenance, such as changing filters. Also sometimes effective are ionizers or electrostatic precipitators, which can trap dangerous particulates, but which also can emit ozone as a byproduct, usually at lower levels than those that will be banned under the new law.

But some board members said that no safe level of ground-level ozone has ever been identified, and that it made them uncomfortable to put certification labels on machines that emit even low levels. The atmospheric ozone layer, by contrast, is a necessary protective layer around the Earth.

Board members voted to require their staff to return to them with results of future research into indoor ozone exposure to determine if allowable levels should be set even lower.

Anyone caught selling the devices after a two-year phase-in period could be subject to fines starting at \$1,000 a day. The board staff said that "sturdy" enforcement would be needed to track down products largely sold on the Internet or via word of mouth, but that it could be done.

"We'll go shopping," said Bart Croes, chief of the board's research division.

janet.wilson@latimes.com