

LANDMARK REGULATIONS WILL LEAD TO CLEANER CLEANERS¹

Emily Main[©]

Household cleaning products are about to get a lot, well, cleaner, thanks to a new ruling from the California Air Resources Board (CARB). The board voted last week to limit the amount of volatile organic compounds (VOCs) emitted by cleaning products and a variety of other household products, due to the fact that VOCs often react with other air pollutants to form lung-damaging ozone.

THE DETAILS: In cleaning products, the primary sources of VOCs are solvents, says Gennet Paauwe, spokeswoman for CARB, such as glycol ethers used to cut grime in products like floor and oven cleaners. Propellants used in aerosol products can emit VOCs as well, as can some synthetic fragrances. VOCs are chemicals that become a gas at room temperature and can be inhaled by people; some react with UV light and other air pollutants to form ozone (or smog), a lung irritant that can trigger asthma attacks and worsen bronchitis and emphysema. In some cases, VOCs can react with ozone in the air to form cancer-causing chemicals, such as formaldehyde.

The new California ruling would require 11 categories of household cleaning products (including glass, oven, grill and furniture cleaners) and insecticides to meet maximum VOC limits, which collectively would cut the VOC levels in California air by seven tons, the equivalent of removing 500,000 cars from the state's roadways. Four tons of those reductions would come from the VOCs removed from all-purpose cleaners alone.

WHAT IT MEANS: The regulations are part of CARB's overall efforts to reduce smog across the state, and the board has instituted similar regulations on products from aerosol deodorant sprays to air fresheners, building products, and automotive fluids. According to the agency, consumer products represent 12 percent of California's VOC emissions, about half the levels emitted by cars, trucks, and other motor vehicles. "We are required to meet federal clean-air standards and are constantly looking for new technologies and opportunities to cut emissions from all sources," says Paauwe, who adds that manufacturers have generally been cooperative in moves to reduce VOC emissions as a public-health measure.

Environmental health advocates have met the new ruling with enthusiasm and relief. "This is definitely very positive, and we're thrilled that they've made the decision," says Alexandra Scranton, director of science and research at Women's Voices for the Earth, a nonprofit that has published numerous reports on the health hazards of cleaning products. "We're hoping the products that are changed for the California market are changed for the national market as well," she adds. That is likely, considering that California has the largest economy in the country, and also has higher retail sales than any other state. Manufacturers find it inconvenient to manufacture products for sale in California and separate products for the rest of the country.

Scranton also notes that the new regulations make it difficult for cleaning-product manufacturers to substitute high-VOC-emitting chemicals with other chemicals that may not emit VOCs but are toxic for other reasons. Because the worst VOC offenders are, for the most part, solvents, the new regulations will likely force manufacturers to switch to surfactants,

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chemicals that dissolve dirt and grime by reducing their surface tension and making it easier for water to penetrate. Though surfactants don't usually emit VOCs, they too can be toxic. The new guidelines would also ban toxic surfactants, such as alkylphenol ethoxylates.

"There's been a tremendous amount of work on safer surfactants," Scranton says, "and there's certainly a lot of emphasis on green chemistry in California."

Of course, you can avoid all sorts of nasty ingredients by making your own homemade cleaners. Last March, the industry-supported American Cleaning Institute (formerly the Soap and Detergent Association) released the results of a survey finding that 28 percent of people have at least tried making their own cleaning products. "The fact that they were even asking the question is telling, that they were concerned to find out how many people are no longer using their products," Scranton says.

The California regulations won't go into full effect until the end of 2013, so in the meantime, follow the 28 percent of Americans who've opted out of toxic cleaners by learning to make your own cleaning products. Scranton's group has instructions on its website for throwing a Green Cleaning Party.