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**SENATE COMMITTEE ON ENVIRONMENTAL QUALITY**

**Senator Allen, Chair**

**2021 - 2022 Regular**

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**Bill No:** AB 1240  
**Author:** Ting  
**Version:** 1/24/2022  
**Urgency:** No  
**Consultant:** Jacob O'Connor

**Hearing Date:** 6/1/2022  
**Fiscal:** Yes

**SUBJECT:** Indoor air pollution

**DIGEST:** Requires the Air Resources Board to provide to the Legislature an addendum to a 2004 report that provides an update on indoor air pollution sources and their associated health impacts based on current science including consideration of ozone-emitting consumer products, natural gas sources, and indoor sources of per- and polyfluoroalkyl substances.

**ANALYSIS:**

Existing law:

- 1) Establishes the Air Resources Board (ARB) as the air pollution control agency in California and requires the ARB, among other things, to control emissions from a wide array of mobile sources and coordinate with local air districts to control emissions from stationary sources. (Health and Safety Code (HSC) §39500 et seq.)
- 2) Requires ARB, in consultation with the State Department of Health Services, the Office of Environmental Health Hazard Assessment, the State Energy Resources Conservation and Development Commission, and any other state agency ARB determines is appropriate, to provide a report to the Legislature summarizing:
  - a) The best scientific information available on indoor air pollution;
  - b) The potential adverse effects of indoor air pollution exposure on public health in the state; and
  - c) Readily available information about the effects of existing regulations and industry practices in mitigating those exposures.
- 3) Requires ARB to enter into agreement with an entity such as the National Academy of Sciences, the University of California, or the California State University to conduct an external scientific peer review of the report.

This bill:

- 1) Requires ARB by January 1, 2025 to submit to the Legislature an addendum to the previous report that contains updates, as necessary based on ARB's assessment, on indoor air pollutants and their associated health impacts. ARB shall consider updates on potential health effects from at least:
  - a) Ozone-emitting consumer products;
  - b) Natural gas sources; and
  - c) Indoor sources of per- and polyfluoroalkyl substances.
- 2) Requires the addendum to be created in consultation with other agencies and undergo external scientific peer review pursuant to the requirements for the original report.

## Background

- 1) *Indoor air pollution is an important source of health risks.* Indoor air pollution consists of toxic gases or particles that can harm public health. Indoor air pollution can come from a wide variety of sources including carbon monoxide and particulate matter from combustion of fuels for heating or cooking, natural substances from organisms in the building such as pet dander and mold, lead and asbestos from building materials, or volatile organic compounds coming from cleaning supplies or new furniture. Generally, the total amount of emissions from these indoor sources are relatively small compared to outdoor sources of air pollution such as wildfire smoke, fossil fuel combustion, or industry emissions. However, because people spend so much time indoors, buildings are enclosed spaces that trap the pollution, and people are so close to the point of emission, that some experts have estimated that pollutants emitted indoors are about 1,000 times more likely to be inhaled than comparable outdoor emissions.

The health effects of indoor air pollutants range from short-term effects, such as eye and throat irritation, to long-term effects such as respiratory disease and cancer. This can be exacerbated in low-income communities who can have older homes and limited ability to retrofit home.

AB 1173 (Keeley, Chapter 987, Statutes of 2002), required ARB to prepare a report on indoor air pollution in California. This report was released in 2005 and estimated that indoor air pollution costs California's economy more than \$45 billion each year due to premature deaths, medical costs, lost worker productivity, and related impacts.

## Comments

- 1) *Purpose of Bill.* According to the author, “AB 1240 will require ARB to issue an addendum to their 20-year-old public health study that looks at sources of indoor air pollutants and policy recommendations for reducing them. This peer-reviewed scientific study will identify sources of pollution and policy recommendations to reduce them.

“Researchers have found that pollutants released indoors are 1,000 times more likely to reach someone's lungs than if they were released outdoors. Californians spend 87% of their time indoors, but even higher recently due to COVID-19 and wildfires. It is important for California policy makers to have the most up to date scientific assessment of indoor air quality as cities, air districts, and state policymakers weigh policies to improve air quality.”

- 2) *Why publish an addendum now?* The findings from the original report are now twenty years old. While the basic findings of the dangers of sources of indoor air pollution have not changed, important new information has been discovered in the intervening years. The impact of per- and polyfluoroalkyl substances (PFAS) on human health has become an increasing point of concern but were a class of emissions not considered in the initial report. In 2020, UCLA released a report on the effects of natural gas appliances on residential air quality and found that if all residential gas appliances were transitioned to clean-energy electric appliances the reduction of particulate matter would result in 354 fewer deaths and save billions of dollars in healthcare costs. The long-term health impacts of exposure to indoor pollution are better known as longitudinal studies that track health impacts over decades of exposure have been performed. Advances in monitoring and purification technologies have created novel solutions for mitigating indoor air pollution, especially in light of the changes that were made to better weather the COVID-19 pandemic.

Given these new findings and technological advances, providing an update to the initial report is important to ensure the Legislature is well informed when crafting policy solutions to problems arising from indoor air pollution.

## Related/Prior Legislation

AB 1173 (Keeley, Chapter 987, Statutes of 2002) required ARB to prepare a scientific report on indoor air pollution in California

**SOURCE:** Author

**SUPPORT:**

American Lung Association in California  
Association for Energy Affordability  
Breast Cancer Prevention Partners  
Building Decarbonization Coalition  
Clean Water Action  
Natural Resources Defense Council (NRDC)  
Sierra Club California

**OPPOSITION:**

None received

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