Today marks an important milestone on the road to protecting consumers from potential hidden hazards in their homes—the emissions from gas stoves. With the publication of this Request for Information, we ask scientists, consumers, and the public to share what they know about:

- Research on the health hazards of gas stove emissions, including any connection to conditions like childhood asthma; and
- Potential solutions to remediate such hazards, including the feasibility, costs, and benefits of those options.

CPSC is an independent agency with the sole mission of keeping people safe from consumer products that pose an unreasonable risk of harm. The trust between CPSC and the American consumer exists because actions like the one we take today make clear that we only act in service to consumer safety. This Request for Information furthers our commitment to American consumers because step one in confronting a potential hazard is understanding its scope and the options for addressing it.

This is not the first time CPSC has considered the health effects of chronic exposure to emissions from home appliances, particularly nitrogen dioxide. As early as 1982, CPSC considered whether indoor nitrogen dioxide emissions from kerosene heaters created a need for regulation. In 1986, CPSC worked with the Environmental Protection Agency to review the health effects of exposure to nitrogen dioxide generated by unvented indoor combustion, including from gas stoves. CPSC has carefully attended to the developing evidence since then.

In 2011, the agency warned the public that “low levels of certain pollutants, such as carbon monoxide and nitrogen dioxide, are produced [by indoor combustion of kerosene]. Exposure to low levels of these pollutants may be harmful, especially to individuals with chronic respiratory or circulatory health problems.” In 2013, we warned that “[t]here is evidence that
high concentrations or continued exposure to low levels of nitrogen dioxide increases the risk of respiratory infection; there is also evidence from animal studies that repeated exposures to elevated nitrogen dioxide levels may lead, or contribute, to the development of lung disease such as emphysema. People at particular risk from exposure to nitrogen dioxide include children and individuals with asthma and other respiratory diseases.”

And in 2017, we released a guide for health professionals on the effects of indoor air pollution with the following finding:

Continued exposure to high NO₂ levels can contribute to the development of acute or chronic bronchitis. . . . The principal site of toxicity is the lower respiratory tract. Recent studies indicate that low-level NO₂ exposure may cause increased bronchial reactivity in some asthmatics, decreased lung function in patients with chronic obstructive pulmonary disease, and an increased risk of respiratory infections, especially in young children.¹

Through the public information-gathering process that we are commencing, I look forward to learning more about the chronic health effects of nitrogen dioxide emissions and particulate matter emissions from gas stoves. In addition, I am interested in any research on the long-term effects of exposure to relatively low levels of carbon monoxide. Does research reveal whether there are any emissions levels of these substances that are proven to be safe inside the home? How should we think about effects on vulnerable populations, including children, older adults, and lower-income Americans? Are there technologies that can eliminate any unreasonable hazards? If technologies to improve the performance of gas stoves are not commercially viable or not demonstrated to be safe, what options remain?

I have boundless optimism in American ingenuity. I am hopeful that by bringing this information-seeking process public, companies will create new solutions or notify us of their commitment to implement existing solutions that were previously unknown to us. Some technologies have long existed with the potential to reduce emissions, including infrared gas burners developed in the 1980s⁶ and magnetic induction cooktops, which were developed over a hundred years ago and have more recently gained traction in the United States. I hope that commenters will submit evidence on the reasons why such longstanding technologies, which may hold the potential to reduce emissions, have not become more widely adopted.

I expect that this RFI will set records for consumer and scientific participation. I hold that optimism because right now, more people are aware than ever before of the potential hazards in this space. More people are discussing their concerns. More people are talking about available alternatives and local, state, and federal incentives such as the up to $840 rebate authorized in the Inflation Reduction Act to reduce the cost of purchasing an electric or induction stove. Through this Request for Information, we seek to provide consumers with the best-available information to keep them and their families safe.

² Letter from James H. Ware, Chairman of the Review Panel on Nitrogen Dioxide, Science Advisory Board of the Environmental Protection Agency, and Morton Lippmann, Chairman of the Clean Air Scientific Advisory Committee, Science Advisory Board of the Environmental Protection Agency, to Carol Dawson, Acting Chairperson of the Consumer Product Safety Commission, National Service Center for Environmental Publications (May 1986)

