

DOCKETED

Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	233854
Document Title:	Multifamily Indoor Air Quality Proposal Comment
Description:	Comment by Sean Armstrong,Redwood Energy, posted by Staff as requested
Filer:	Adrian Ownby
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	7/14/2020 10:44:05 AM
Docketed Date:	7/14/2020

From: Sean Armstrong <sean@redwoodenergy.net>

Sent: Tuesday, July 14, 2020 2:52 AM

To: Goebes, Marian <MGoebes@trccompanies.com>

Cc: Cunningham, Kelly <KACV@pge.com>; Mark Alatorre <M6AC@pge.com>; Alanna Torres <atorres@energy-solution.com>; Heidi Werner <hwerner@energy-solution.com>; McCollum, Elizabeth <EMcCollum@trccompanies.com>; IAQ <IAQ@trccompanies.com>; Shirakh, Maziar@Energy <Maziar.Shirakh@energy.ca.gov>; Ownby, Adrian@Energy <Adrian.Ownby@energy.ca.gov>; Brook, Martha@Energy <Martha.Brook@energy.ca.gov>; Rider, Ken@Energy <Ken.Rider@energy.ca.gov>; CA Building Decarbonization <ca-building-decarbonization@googlegroups.com>; McAllister, Andrew@Energy <andrew.mcallister@energy.ca.gov>

Subject: Re: Response to Title 24 MF IAQ CASE comments

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Hi Marian,

Thank you for your reply.

Your proposal heartlessly harms people of color, and wastes limited financial resources on an ineffective solution, in contradiction to a large volume of objections by fellow building scientists, advocates for public health, and advocates for low income households like myself. I strenuously object, as detailed below.

On Mon, Jul 13, 2020 at 2:31 PM Goebes, Marian <MGoebes@trccompanies.com> wrote:

Dear Mr. Armstrong,

Thank you for your comment on the range hood measure in the MF IAQ CASE proposal. You had provided the alternative requirement:

1. A 100 CFM, 1 Sone, always-on hood for all ranges, that is designated as the IAQ Whole House Fan. This is the important part to please respond to, rather than ignore again (I have proposed this both formally to the CEC and informally to you in writing multiple times, and I'm impatient to have my actual proposal responded to). There is a requirement for a Whole House Fan in the Code. It doesn't use any more or less energy to designate the kitchen hood be this IAQ fan, but it saves lives. Please stop saying it "wastes energy," to use the range hood as the mandatory IAQ fan. It is actually the least energy-consuming proposal, saving more energy than your CASE team's proposal. It was Russ King's idea, to give him credit—the senior building scientist at CalCerts.

2. Hoods over gas stoves operate up to 300 CFM at 3 Sones or less.

In response:

- We agree that range hoods are often not used during cooking events. Based on comments from you and other stakeholders, we have proposed that the Energy Commission add requirements that the builder provide written or electronic instructions for the use of local exhaust equipment,

including range hoods. Instructions? Are you joking? Show the science to me, and anyone else, that "instructions" to parents are sufficiently protective of children's health. Have you met parents who are "anti-vaxxers?" Parents who beat their children? You've decided to doom children to asthma rather than modify your proposal (stubborn much?) which has been roundly criticized as inadequate—it doesn't protect health, but it triples the cost of the unused hood, so it's a ineffectual increase in construction costs, requiring both the multifamily developers and the manufacturers to develop and pay for a solution that only works 14%-29% of the time. The proposed language would be added to Section 10-103 of 2022-Title 24, part 6 (which provides requirements for builders at the time of permitting). For systems in tenant spaces that are not individually owned and operated, instructions shall state that the building's owner or their representative shall provide a copy of such information to all tenants at the start of their occupancy. The purpose of this is to help increase education of residents on the use of range hoods.

- As we have discussed in previous communications, a requirement for a 100 cfm continuous hood would have significant energy impacts, and we do not feel those are justified since residents are not cooking the majority of the time. I am, and have been, proposing that the mandatory IAQ fan, which Code explicitly says can be the range hood, be specified to always be the kitchen hood over gas stoves. Shower mist doesn't cause leukemia, and farts don't cause asthma—gas stoves do. So there's a strong public health justification for moving the IAQ fan to the range hood. Please—let this be the last time you write back to me "misunderstanding" my proposal to move the IAQ fan to the range hood.
- We agree that NO₂ and CO are released by natural gas stoves. However, PM_{2.5} is the pollutant with the greatest health effects from cooking (Logue, et al. 2011, as cited in the CASE report), and both electric and natural gas cooktops release PM_{2.5}. NO₂, CO and Formaldehyde are only found in gas combustion and are found at hazardous levels, so of course the two stove should be treated differently—gas stoves are far more dangerous, as documented in every study on the matter. This is not the first time I and others have commented with this set of facts, so why the repeated non-responsiveness? Gas stoves are a well-documented public health hazard that disproportionately affects PEOPLE OF COLOR. Could you please wake up and exist in this moment in history? Covid-19 is killing people of color at twice the rate of pale people, and part of the reason why is people of color live in crappy, polluted apartments. Your job is to solve that problem—stop ignoring it! Consequently, the Statewide CASE Team recommended the same capture efficiency and airflow requirements for range hoods over gas and electric stoves for the Title 24-2022 cycle. Why? They're completely different appliances—why are you insisting on conflating the equivalent of running your car exhaust in through the window with a toaster? We recognize this is an evolving area of research. No, this is well documented and you're pretending we're illiterate, and can't read decades of studies and metastudies on how gas kitchen ranges cause asthma. There aren't papers showing asthma from electric stoves. Just stop it. If new research is available for the Title 24-2025 cycle, the Statewide CASE Team could support different requirements based on fuel type at that time. No you won't. You've blown us off for months.

Thank you for participating in the Title 24-2022 development process.

It's been uniquely dispiriting, and I'm ashamed to be associated with this proposed solution.

Sincerely,
Sean

Sincerely,

Marian

Marian Goebes, PhD

on behalf of the California Statewide Utilities Codes and Standards Team

Associate Technical Director, Research and Technology Commercialization

TRC Advanced Energy



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Grand Prize Winner of the International PCBC Gold Nugget Awards-2016

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Winner of the Department of Energy Innovation Award-2015

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