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Air Board study in error? They don't seem to care

By Lois Henry, Californian Columnist

You'd think I would cease to be amazed at the "damn the facts, full speed ahead" MO exhibited by California's air pollution cabal.

And yet, here I sit, astounded once again.

Not only did an obscure but important committee in the bowels of the California Air Resources Board recently ignore dozens of pages of serious criticisms of a new pollution study, but at least one committee member seems to have zero understanding of how such studies are used to create regulations that affect all of us out here in real people land.

The Research Screening Committee should be where regulators, scientists and the public tear into a study's methodology and conclusions. Challenge the science and make it stand up, or ditch it.

Instead, criticisms were staunchly ignored. The committee rubber stamped it last month without a backward glance.

OK, I'll stop ranting and catch you up.

A couple months ago, I alerted you to a new study that was intended as the final word, sort of, on the health effects of air pollution in California.

Specifically, it was supposed to nail down the terrible doings of PM2.5, tiny particulate matter from dust and soot, which supposedly lays waste to thousands of Californians every year by making them die "prematurely."

The study was written by Berkeley Professor Michael Jerrett and a few others.

It is very complex and looks at PM2.5's "hazard ratio" through nine different models. The higher the hazard ratio, the greater your chances of dying from too many whiffs of PM2.5. (See box.)

Only one of the nine models showed a slightly elevated hazard ratio -- 1.08. A hazard ratio of 1 is null, meaning no risk.

So, even that finding is statistically insignificant.

Considering how CARB uses these studies to require industry to get expensive retrofits and other devices (that don't work... oops, sorry, that's another column), or replace their vehicle fleets entirely, I felt Jerrett's 1.08 was too little and based on flimsy numbers.

I wasn't alone. Other people way smarter than me chimed in with more than 50 pages of criticisms outlining the many ways they felt the study was flawed.

They listed all kinds of issues from a lack of knowledge about actual inhalation levels to not incorporating changes in PM2.5 levels over time (they've been going down).

Most upsetting to critics was that the study's conclusion -- the only part most people will read -- calls the relationship between PM2.5 and all causes of death "significant" despite the fact that only one of nine models showed any blip at all in the hazard ratio.

The study's own findings do not support such a conclusion. It's misleading.

Eh, no bother.

The Research Screening Committee approved it lockstep.

I suppose I shouldn't be surprised given some of the discussion at the committee's June 9 meeting, when it took public comments about the study.

Committee member Irva Hertz-Pioccotto, a public health sciences professor at UC Davis and epidemiologist, went on at some length about how she didn't understand why critics were focusing on "all cause" deaths.

That, to her, didn't matter since the connection between PM2.5 and cardio-vascular disease is well established. She added the same was true for deaths from respiratory disease.

Wrong. Even the Jerrett study shows no elevated risk for respiratory death from PM2.5 exposure.

Her brush off of the "all cause" category is more concerning, however.

The all cause category is the only one that's allowed to be used to make regulations. It's supposedly why we engage in all this rigamarole in the first place.

I emailed Hertz-Pioccotto Tuesday afternoon, but did not receive a reply.

I know I should be more jaded by now. But I really continue to be amazed at the monolithic attitude against a real discussion of air pollution science.

Or, maybe I'm giving CARB, et. al., too much credit.

Perhaps they're just lazy.

By the numbers

Using hazard ratios for all causes of death due to exposure to PM2.5 from a variety of studies, CARB has come up with what it says are actual numbers of Californians who die "prematurely" each year.

These numbers have bounced around, mostly spiralling downward.

Here's the most recent: CARB says 9,200 Californians die each year from exposure to general PM2.5.

About 2,000 of those deaths can be attributed to diesel PM2.5, specifically, according to CARB.

They have used these numbers to justify the estimated costs of their new truck and heavy equipment rules, \$300 million a year versus \$19 billion a year in supposed health care costs from all those premature deaths.

Over the life of that rule, going into effect Jan. 1, 2012 through 2023, CARB estimates about 3,000 lives will be saved, or 291 per year.

