

Lois Henry CALIFORNIAN COLUMNIST

# Dodgy science will kill industry



**W**e are about to cripple California's trucking and construction industries for absolutely no good reason. If I really believed the California Air Resources Board's draconian new diesel emissions standards would save thousands of lives a year, I might say, sorry guys, you gotta suck it up for the greater good.

But when you scratch the surface of the alleged science used

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by CARB to justify these rules, there's just no "there" there. Our air is NOT killing us, despite what the "environmental alarmist complex" would have us believe.

And, oh yeah, CARB's lead researcher, Hien T. Tran, who wrote the report on which the diesel rules are based lied about having a Ph.D. in statistics from University of California, Davis, according to a CARB spokesman. That's right, he made it up to get a CARB management job for which a Ph.D. isn't even required. No Ph.D. requirement seems more than a bit loose to me, but

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# OPINION

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# HENRY: Emissions will be close to 2023 goal without extra regulation

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that's another story.

The CARB spokesman said they're standing by that report, as well as their diesel rules, which were to go into effect in 2011 but likely will be delayed two years under a state budget deal as a nod to the crumbling economy.

Some people are calling for the rules to be eased while we get through this econ-aggaged, but I say that's a Band-aid on an axe wound.

The rules need to be scrapped. We need a redo, this time using a group of bona fide scientists who don't have to lie about their credentials. The object of the new standards, by the way, is to reduce PM2.5 (tiny bits of soot) from diesel emissions, which CARB adamantly believes kills thousands of Californians every year, despite studies to the contrary.

The agency has mandated that all diesel trucks and heavy equipment be retrofitted with devices to reduce PM2.5 emissions by 80 percent by 2020 compared to what they were in 2000.

The report on which the rules were concocted is valid, insists a CARB spokesman, because it underwent "peer review" by other scientists.

Yes, but only the draft version. Not the final one with comments from the public, including a number of scientists who disputed its conclusions and the fact that it discounted studies showing little to no increased death rate in California from PM2.5. (Even a map from one of the studies CARB did value showed little to no PM2.5 deaths in California, but that was also ignored in the report.)

As for the studies that were used in the report, they were weighted by a group of 12 scientists, nearly half of whom wrote or helped author the very studies being graded. And at least a few of those graders are being paid by CARB for more studies.

When I asked Bart Croes, chief of CARB's research division, and Linda Smith, chief of CARB's health and exposure assessment branch, how that's not a screaming conflict of interest, they passed the buck and said the scientists were picked by the EPA. In my business, that's what we call a "non-denial confirmation."

Digging further into that report, I wondered why it was OK to take results from one air study that found increased death rates from PM2.5 in Los Angeles, mix them with results from studies elsewhere in the U.S., then average those results and apply them to the entire state of California.

I don't have a Ph.D. (real or fake), but that seems pretty slapdash to me.

Smith told me averaging results is perfectly acceptable because of the volume of studies from all over the world that show PM2.5 is dangerous to health and "PM is PM" — just as hazardous one place as another.

Not quite, according to Robert F. Phalen, Ph.D. (a REAL one!), with the Air Pollution Health Effects Laboratory at UC Irvine and author of the book "The Particulate Air Pollution Controversy: A Case Study and Lessons Learned."

CARB simply measures how many micrograms of PM are in a cubic meter of air, he writes, not by size or even chemical composition.

"The use of this crude mass indicator is not only scientifically shaky, but it can also be hazardous to public health," Phalen writes.

For example, filters that lower particles in emissions by breaking down them into smaller bits could actually increase adverse health effects, Phalen says. And without knowing the chemical makeup of the particles that are actually causing health problems, you could be eliminating harmless material while ignoring real culprits.

"The available science is not sufficient to define the

**"It's a matter of political judgment if you put your finger on ozone."**

— Stanley Young, assistant director for bioinformatics at the National Institute of Statistical Sciences in North Carolina/Diego.

key indicators that determine the health effects of PM," he concludes.

Even if you believed PM2.5 was knocking off your neighbors in droves, CARB's own estimates show we'll be very close to the 2023 emissions reduction goal without any extra regulation at all as old diesel equipment is retired. In fact, we'll be within four or five tons per day of the goal without any added regulation at all.

I mentioned that to CARB's Smith and she sharply reminded me that four tons could represent five to 10 deaths per year, depending on where you looked in Los Angeles.

Which brings me back to the "science" CARB used to come up with its diesel rules.

They relied on a number of epidemiological studies, large sets of observational data (not experiments) queried by scientists to tease out patterns.

The problem with those kinds of studies, according to Stanley Young, assistant director for bioinformatics at the National Institute of Statistical Sciences in North Carolina and who has a real Ph.D. in statistics and genetics, is they can't control for every factor and often end up with biased conclusions.

"Say you're looking at a situation where the temperature goes up, ozone goes up, PM2.5 goes up and humidity goes up. Which of those factors, if any, is killing people?" Young said. "It's a matter of

political judgment if you put your finger on ozone."

When other scientists try to replicate results from observational studies, the conclusions don't hold up 80 to 90 percent of the time.

"If you do exactly what the original researchers did, yes, you get the same results,"

Young said. "When you look at the way they did their analysis, that's where things get dodgy. There is a lot of freedom to move the answer around."

It was Young who blew the whistle on Tran for not having a Ph.D. after he read Tran's report. He couldn't believe how amateurish and poorly done it was.

"Frankly, I was shocked," he said. "I asked if they had looked at the raw data from key papers and done their own analysis. They did not

have the data and the answer was no. "It's a crazy situation. And I've just been looking (at this from the outside." The view isn't much better from the inside. *Opinions expressed in this column are those of Lois Henry, not The Bakersfield Californian. Her column appears Wednesdays and Sundays. Comment at people.bakersfield.com/home/Bl og/noholdsbarred, call her at 395-7373 or e-mail lhenry@bakersfield.com*