

## The Bakersfield Californian (March 15, 2009)

(<http://www.bakersfield.com/news/columnist/henry/x1763640146/Lois-Henry-Dodgy-science-strangles-industry>) (originally <http://www.bakersfield.com/1020/story/716452.html>)

# Lois Henry: Dodgy science strangles industry



BY LOIS HENRY, Californian staff writer

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[We 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 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 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-aggeden, 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 bonafide 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 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 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, Asst. 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 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 <http://people.bakersfield.com/home/Blog/noholdsbarred>, call her at 395-7373 or e-mail [lhenny@bakersfield.com](mailto:lhenny@bakersfield.com)

## **The Bakersfield Californian (March 25, 2009)**

(<http://www.bakersfield.com/opinion/forum/x468334809/California-cant-wait-on-diesel-regs>)  
(originally <http://www.bakersfield.com/1435/story/725594.html>)

# **FORUM: California can't wait on diesel regs**

The Bakersfield Californian | Tuesday, Mar 24 2009 9:59 PM

Lois Henry gets it wrong in her March 14 column, "Dodgy science strangles industry," which she uses to criticize the California Air Resources Board's new regulations aimed at reducing emissions from aging, dirty big-rigs and off-road construction equipment.

The State Bus and Truck Regulation, adopted in December after exhaustive research and peer review, and which Ms. Henry would like to "redo," will prevent 9,400 deaths between 2011 and 2025; greatly reduce days of missed work, school and hospitalization; and lower health care costs by billions of dollars. Asthma symptoms, cancer, heart and lung disease will all be affected for the better, once emissions from these one million vehicles are successfully controlled.

The same can be said for CARB's Off Road Regulation, adopted in 2007, which will slash toxic and cancer-causing diesel emissions from the state's estimated 180,000 "off-road" vehicles used in construction, mining, airport ground support and other industries. Over its lifetime, the rule will prevent at least 4,000 premature deaths statewide and avoid \$18 billion to \$26 billion in premature death and health costs.

It is very important to CARB that we scrutinize economic as well as health impacts during the rule development process. As part of that, we meet with the hundreds of business owners and stakeholders impacted, so for almost two years, we went up and down California. As a result, the Truck and Bus regulation was revised more than once to accommodate concerns voiced by the trucking industry.

With regard to the harm that stems from exposure to PM 2.5, there have been several studies produced within just the past few years that support CARB's need to regulate emissions from the nearly 1 million trucks and buses driving California's highways. These include a 2008 report by Cal State Fullerton researchers that found dealing with the health impacts of air pollution, especially diesel emissions, costs the state \$28 billion annually.

If the myriad studies attesting to the harm posed by "tiny bits of soot" are not enough evidence, I encourage you to visit the websites of the American Lung Association, American Cancer Society, American Heart Association, American Academy of Pediatrics, Union of Concerned Scientists and countless other respected organizations for further proof that CARB's steps are critical to saving lives. The weight of scientific evidence clearly supports an increased risk of dying before your time if you are exposed to elevated PM 2.5 levels.

Ms. Henry's whole premise for questioning the science behind the diesel regulations is a red herring. Though we do not take lightly the false claim of a PhD in Statistics from UC Davis by one of the writers of the PM 2.5 health report, Ms. Henry greatly overplayed the significance of this misstatement as it relates to the truck regulation.

The individual in question simply pulled numerous studies together into one document. He did not produce one single piece of new health evidence. More importantly, the report that he helped compile went through four levels of independent, external peer review. Three nationally recognized scientific advisors from Harvard, Brigham Young University and the State's Office of Environmental Health Hazard Assessment assessed all aspects of the work, including all publicly released versions of the report. The UC Berkeley Institute of the Environment selected six formal peer reviewers for the report. We also convened a panel with the U.S. Environmental Protection Agency, the World Health Organization and internationally recognized PM health effects experts. And at the request of the Engine Manufacturers Association, the diesel soot exposure estimates were reviewed by Philip Hopke of Clarkson University. The result? All levels of review agreed with the basic conclusions of the report.

What CARB knows after more than 40 years in business is that diesel exhaust is an insidious and pervasive enemy, responsible for 70 percent of the known cancer risk that comes from air pollution. It can and does kill. To delay enactment of either the Off-Road Heavy Duty Diesel or Statewide Truck and Bus regulation would waste precious time and only cause further pain and suffering to those whose health has already been compromised by diesel air pollution.

*Mary D. Nichols is chairwoman of the California Air Resources Board. The Californian reserves the right to reprint Another View commentaries in all formats, including on its web page.*

<http://people.bakersfield.com/home/Blog/noholdsbarred/42886#comments>

Lois Henry Blog (March 25, 2009):

**No holds barred -> The head of CARB has some choice words for me!**

Mary Nichols, the head of the California Air Resources Board took me to task in a letter we published today (3/25) in our Editorial Section.

While I appreciate that she took the time to write (though put me off on underlings when I called for an interview..) I stand by my stories and note that her letter relies, again, on epidemiological studies which have not had their results independently verified and replicated.

Also, I disagree that it's not a big deal that their researcher, Hien Tran, lied about having a PhD from UC Davis in statistics because all he did was compile information from the studies.

First, he did a bit more than just throw together other people's work. He interpreted it, averaged findings and picked numbers, sometimes at random, to determine the safety of PM2.5 levels.

And that report, not the studies, was what CARB board members used to create the diesel emissions rules that will kill California's trucking and heavy equipment industries.

So, nice try and thanks for playing, but no cigar!

[http://www.bakersfield.com/contact\\_us/newsroom/management/story/36458.html](http://www.bakersfield.com/contact_us/newsroom/management/story/36458.html)