

The Air We Breathe, Part 5 – Pullback

By John Benson

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1. Introduction

I had basically completed part 4 of this series for posting in May, and my home state (California) reversed course on several pending actions. This is because expected actions by the silly federal chief executive, who opposes any stricter air quality regulations (he must not need to breathe).

My home state (California) has an interesting relationship with air. We have more vehicles than any other state, and also drive more miles. Many of these miles are driven in very long daily commutes in four of the largest metropolitan areas in the US.¹ Our air quality problems date back to the 1950s. Since then, we have had the most aggressive pollution control measures in the U.S. In fact, in recent years a group of states with similar issues have adopted our solutions. One other thing, the governmental body that defines the rules to remedy our air quality issues is the California Air Resources Board (CARB).²

2. Recent Developments

California has decided to abandon its groundbreaking regulations phasing out diesel trucks and requiring cleaner locomotives because the incoming Trump administration is unlikely to allow the state to implement them.³

State officials have long considered the rules regulating diesel vehicles essential to cleaning up California's severe air pollution and combating climate change.

The withdrawal comes after the Biden administration recently approved the California Air Resources Board's mandate phasing out new gas-powered cars by 2035, but had not yet approved other waivers for four diesel vehicle standards that the state has adopted.

President-elect Donald J. Trump has threatened to revoke or challenge all zero-emission vehicle rules and California's other clean-air standards. By withdrawing its requests for U.S. Environmental Protection Agency approval, the Newsom administration is signaling a dramatic step back as the state recalibrates in anticipation of the new Trump era.

"California has withdrawn its pending waiver and authorization requests that U.S. EPA has not yet acted on," Air Resources Board Chair Liane Randolph said in a statement. "While we are disappointed that U.S. EPA was unable to act on all the requests in time, the withdrawal is an important step given the uncertainty presented by the incoming administration that previously attacked California's programs to protect public health and the climate, and has said will continue to oppose those programs."

¹ Los Angeles Combined Statistical Area (CSA) at population 23 million (2nd largest); SF Bay Area Extended CSA (5th largest), 9.2 million pop.; San Diego, Chula Vista, Carlsbad Metropolitan Statistical Area (MSA, 18th largest), 3.3 million pop.; Sacramento-Roseville CSA, (24th largest), 2.7 million pop.

² John Benson, Energy Central, "The Air We Breathe," November 2022, <https://energycentral.com/c/cp/air-we-breathe>

³ Alejandro Lazo, Cal-Matters, "California abandons diesel truck ban and 3 other clean-air rules before Trump is sworn in," January 14, 2025, <https://calmatters.org/environment/2025/01/trump-california-withdraws-diesel-clean-air-rules/>

Environmentalists were distressed, saying it puts communities at risk and dismantles key programs.

“To meet basic standards for healthy air, California has to shift to zero-emissions trucks and trains in the coming years. Diesel is one of the most dangerous kinds of air pollution for human health, and California’s diesel problem is big enough to cast its own shadow,” Paul Cort, director of the group Earthjustice’s Right To Zero campaign, said in a statement. The group called on “Governor (Gavin) Newsom, state legislators, and our air quality regulators to join us — to clean up our freight system and fix the mess EPA’s inaction has created.”

California’s Advanced Clean Fleet rule, which phases out diesel trucks, was one of the most far-reaching and controversial rules that California has enacted in recent years to reduce air pollution and greenhouse gases. It would have ended the sale of new fossil-fuel trucks in 2036 and required large trucking companies to convert their medium and heavy-duty fleets to electric or hydrogen models by 2042.

The truck fleet rule was approved in 2022 after years of analysis, public hearings and discussions with industries and experts. It would have ended diesel’s stronghold on goods movement in the state, with potentially profound effects on the state’s environment and economy.

Trucking companies had already sued the state to stop the measure, saying electric and hydrogen big rigs are not practical for long-haul uses and that it would destroy the state’s economy.

“The California Trucking Association has consistently stated the Advanced Clean Fleets Rule was unachievable,” Eric Sauer, chief executive of the association, said in a statement. He said the industry would work with the state air board and EPA “to further reduce emissions in a technologically feasible and cost-effective manner. that preserves our State and the Nation’s critical supply chain.”

Diesel exhaust has been linked to cancer and contains fine particles that can trigger asthma and heart attacks as well as gases that form smog. Low-income, disadvantaged communities of color near ports, freeways and warehouses, especially in the Los Angeles and Long Beach area, have long complained about noxious and dangerous diesel exhaust.

The state withdrew three other measures regulating emissions from diesel-powered locomotives, commercial harbor craft and refrigeration unit engines that are hauled by trucks and rail cars.

Under the railroad rule, only locomotives less than 23 years old would have been allowed in California beginning in 2030, unless they were zero emissions. The rule also limited how long they could idle. People living in communities with trains and rail yards have long complained that the emissions are making them sick. Railroads said no viable zero-emission locomotive technology and infrastructure exists yet so the rule’s “timeline is impossible,” and that it would prematurely retire viable equipment and disrupt goods movement.

Under the Clean Air Act, Congress more than a half-century ago granted California the unique ability to set its own aggressive emission standards for cars, trucks and other vehicles because of its severe smog. But the federal EPA must grant California a waiver to implement them.

For decades, the EPA has granted California the waivers. Only one waiver was initially denied — a 2008 rule setting greenhouse gas emission standards for cars — and that decision was quickly reversed and the waiver granted.

But when Trump was last in office, his administration took aim at the state's special status to enact stricter rules — one of the more significant environmental clashes of the first Trump era. The Biden administration in 2022 reversed those efforts.

California air-quality officials have been waiting for years for the Biden administration's EPA to approve the last four rules, hoping that time wouldn't run out. But the EPA failed to act in time.

What's more, Randolph⁴ said litigation will be increasingly likely under the incoming Trump administration so it was time to "protect and defend the work that we've already done." Some business groups have already sued to try to block the mandate banning sales of gas-powered cars in 2035...

"We know there's going to be a lot of litigation in the offing, whether it's entities suing us, or us going on the offense and trying to protect our ability to move forward to address both air quality and climate change," she said.

California may have to suspend any future rule-making for vehicles over the next four years of the Trump administration and rely instead on voluntary agreements with engine manufacturers, trucking companies, railroads and other industries...

The truck fleet rule would have affected about 1.8 million medium and heavy-duty trucks on California roads, including delivery trucks used by FedEx, UPS and Amazon. The trucking industry had cited the high costs of zero-emission vehicles, limited charging and fueling infrastructure, and the financial burden on small operators.

Some provisions, for drayage trucks that serve ports, were supposed to be implemented already, but the air board put them on hold pending the outcome of the Biden administration's approval.

Some companies, including Pepsi, have already rolled out electric and hydrogen fleets. Amazon has deployed 50 heavy-duty electric trucks in Southern California as well as hundreds of electric vans nationally. Sales of zero-emissions trucks have increased despite no deadlines kicking in. In 2023, one out of every six medium and heavy-duty trucks sold in the state — more than 18,000 — were zero emissions.

Author's comment: Since I live in California, I frequently see zero-emissions medium-duty vans on the street, and Amazon seems to have gone full-in on these, at least where I live in the SF Bay Area. Amazon's Headquarters are in the Puget Sound (Seattle) Metro Region in Washington State, one of the most environmentally conscious areas in the US, and Amazon is one of the most environmentally conscious companies in the world. Go to the sites linked below for details.

⁴ Air Resources Board Chair Liane Randolph, also see quote on the bottom of page 1.

<https://www.aboutamazon.com/>
<https://sustainability.aboutamazon.com/>
<https://www.aboutamazon.com/news/sustainability/amazon-carbon-credit-decarbonization-sustainability>

Also, as Liane Randolph said on page 3, there will be lots of litigation before this is over. Executives in the transportation industries know that we've been defending our air quality standards for over 50-years, and we are not going anywhere. The US chief executive is going to disappear in a poof of smoke in less than four years (if not earlier), and we will still be here. Also, see "Late Breaking News" (Section 4) below.

3. Prior Related Posts

The following are earlier papers your author posted on this subject.

Amazon Update: The year was 2017. In November of that year, I posted one of my earliest papers to Energy Central: "Disruption in U.S. Product Distribution Sectors." There is a summary and link to this earlier paper in "Amazon Update."

In the above paper, many of the "disruptions" were being implemented by Amazon, although their rapid growth over the last five years have encouraged similar businesses to emulate them.

I can't say my wife and I have not visited Amazon since then. In fact, we almost visit them daily, being loyal Amazon Prime Members. I also know that they have been amazingly successful but haven't really tracked them since the above paper. This paper will remedy that.

<https://energycentral.com/c/ec/amazon-update>

Really Big Electric Trucks: There are two subjects in this paper. Both of them are flavors of the title, but one I've written about before, and the other, not so much. The first is definitely a clean-sheet design, and the latter looks (and mostly is) derivative of earlier generations. Both need to ramp production very quickly to help my home state (California) make the transition to non-diesel big rigs.

Starting in 2036, no new fossil-fueled medium-duty and heavy-duty trucks will be sold in the state. Large trucking companies also must convert to electric or hydrogen models by 2042. The California Air Resources Board (CARB) decided to review progress and obstacles in meeting the deadlines two and a half years from now.

<https://energycentral.com/c/ec/really-big-electric-trucks>

Charging Big Rigs: I've written incessantly about how California intends move to net-zero greenhouse gasses (GHGs) by 2045. One of the most challenging sources of the GHGs are class-8 Semis (a.k.a. big rigs).

This post is about a program and firm that is providing drayage big rigs with electric battery charging infrastructure along their most heavily travelled routes. "Drayage" refers to a form of trucking service that connects the different modes of shipping products.

The California Air Resources Board (CARB) recently approved rules requiring all of California's in-state drayage fleet – approximately 33,000 trucks – to be zero-emission by 2035.

Also, CARB just formed an alliance with major big rig and big rig engine manufacturers: The Clean Truck Partnership. This is covered in this post.

<https://energycentral.com/c/ec/charging-big-rigs>

Participants in the Last Clean-Vehicle Segments Emerge: I have written enough papers on hydrogen-fueled vehicles to know their potential advantages verses battery-electric vehicles (BEV):

- Fast refueling
- Very long run-time without refueling

There are two segments of vehicles that appear to be unable to easily transition to designs with no greenhouse gas (GHG) emissions:

- Construction vehicles (bulldozers, front loaders, dump trucks, backhoes, etc.)
- Long-range/duration road vehicles (interstate transports, heavy tow trucks, etc.)

There seems to be a match between the above “advantages” and “vehicles” that might suggest the emergence of some hydrogen-fueled vehicles to meet the needs of the two vehicle segments.

<https://energycentral.com/c/ec/participants-last-clean-vehicle-segments-emerge>

4. Late Breaking News

Finally, as I was starting to final proof this paper, I came across the latest news in the State of California vs. Trump in the air quality wars.

This is the world the Trump Administration wants your kids to live in. California’s efforts to cut harmful pollution won’t be derailed by a glorified press release masquerading as an executive order.

– Governor Gavin Newsom⁵

4.1. California’s Climate Leadership

The state continues to set clean energy records. Last year, California ran on 100% clean electricity for the equivalent of 45 days. Since the beginning of the Newsom Administration, battery storage is up to over 13,000 megawatts – a 1,600%+ increase.

Pollution is down and the economy is up. Greenhouse gas emissions in California are down 20% since 2000 – even as the state’s GDP increased 78% in that same period.

4.2. Republican Senate’s Acts and Gov. Newsom Responds

SAN FRANCISCO, Calif. - The U.S. Senate on Thursday voted to block a California clean air rule that would ban the sale of gas-powered cars by 2035. But before lawmakers even took that vote, California Gov. Gavin Newsom was fighting back.⁶

⁵ Governor Gavin Newsom, <https://www.gov.ca.gov/2025/04/09/glorified-press-release-governor-newsom-responds-to-latest-trump-order-turning-back-the-clock-on-climate/>

⁶ John Krinjak, KTVU Fox 2 News, San Francisco via Yahoo News, “Newsom to sue Trump after Senate blocks California EV rules,” May 23, 2025, <https://www.yahoo.com/news/newsom-sue-trump-senate-blocks-134248265.html>

"We'll be judged to have stood up at this moment," Newsom said at a news conference in San Francisco.

Late Thursday morning, Newsom announced in Sacramento that he and California Attorney General Rob Bonta will sue the president yet again.

"I'll be suing the Trump administration in court for the 23rd time," said Bonta.

The lawsuit comes after the Republican-controlled US Senate voted Thursday to undo California's first-in-the-nation rule banning the sale of new gas-powered cars by 2035--as well as to roll back the state's emissions standards.

Final author's comment: We've been down this road before, including during the prior Trump Administration, in September 20, 2019: *California Attorney General Xavier Becerra today, with Governor Gavin Newsom and the California Air Resources Board, led a coalition of 24 attorneys general and the cities of Los Angeles and New York in filing a lawsuit against the National Highway Traffic Safety Administration (NHTSA). The lawsuit challenges the Trump Administration's regulation designed to preempt California's greenhouse gas emissions and Zero-Emission Vehicle (ZEV) standards, also known as California's Advanced Clean Car Standards.*⁷

I don't know how the above suit ended (I had trouble finding this specific result because California (et al) sued the Trump Administration at least 100 times during this period), except I know California (et al) kept our Advanced Clean Car Standards.

⁷ Rob Bonta, Attorney General, State of California Press Release, "Attorney General Becerra Files Lawsuit Challenging Trump Administration's Attempt to Trample California's Authority to Maintain Longstanding Clean Car Standards," Sep 20, 2019, <https://oag.ca.gov/news/press-releases/attorney-general-becerra-files-lawsuit-challenging-trump-administration%E2%80%99s>