LAW360

Portfolio Media. Inc. | 111 West 19th Street, 5th floor | New York, NY 10011 | www.law360.com
Phone: +1 646 783 7100 | Fax: +1 646 783 7161 | customerservice@law360.com

Key Roadblocks In Calif.'s Pivot To Electric Heavy-Duty Trucks

By **Linda Chiem**

Law360 (April 7, 2023, 8:13 PM EDT) -- California's plan to phase out sales of heavy-duty diesel trucks will accelerate the commercial trucking industry's pivot toward electrification, but truck manufacturers, suppliers and vendors are bracing for major compliance hurdles amid ongoing supply chain shortages, inadequate charging infrastructure and a flurry of still-to-come regulations.

The Golden State will roll out the nation's first zero-emission commercial truck standard after the California Air Resources Board received a federal Clean Air Act waiver to implement its **Advanced Clean Trucks** regulation, which the board initially adopted in 2020, then amended and finalized in 2021.

The U.S. Environmental Protection Agency's March 31 decision **granting the waiver** clears the way for California to enact tougher standards establishing a first-of-its-kind sales mandate for makers of medium- and heavy-duty trucks such as semi-trailers, big rigs, cement mixers, garbage trucks, delivery vans and airport shuttles.

The goal is to boost the supply of hybrid or electric heavy-duty trucks sold in California over the next two decades in what environmentalists have lauded as a landmark endeavor to slash emissions, improve air quality and tackle climate change. But commercial trucking industry groups such as the American Trucking Associations have warned that complying with California's "unrealistic and unfeasible" sales mandates will be a messy undertaking.

Experts told Law360 that myriad regulatory questions concerning the availability of charging infrastructure and battery technologies for heavy-duty trucks could throw a wrench in California's plans to force the trucking industry to move away from its fossil-fuel dependency and fully embrace electrification. Additionally, a pending D.C. Circuit legal challenge from Republican-led states and energy industry trade groups **seeking to invalidate California's authority** to create its own emissions standards for cars and light trucks could also threaten the state's efforts to make zero-emission vehicles the new kings of the road.

"The signal that is being sent to vehicle manufacturers and engine manufacturers is that we are moving at breakneck speed — compared to most regulations — toward zero-emission vehicle obligations," Squire Patton Boggs environmental law partner Douglas McWilliams told Law360.

"Patchwork" Regulation

California has the unique authority to set stricter greenhouse gas emissions standards and run its own zero-emission vehicles program under a Clean Air Act waiver, which was **revoked** by the Trump administration in 2019 and **reinstated** by the Biden administration in March 2022. The state for decades has pursued more aggressive standards because of heightened air pollution problems due to its sprawling geography, mountainous terrain and population growth.

Section 177 of the Clean Air Act allows states to adopt California's stricter vehicle emission standards instead of the federal government's, and as of last year, some 17 states had standards tied to California's, according to CARB. So far, the Advanced Clean Trucks regulation has been adopted by at least six other states — New York, New Jersey, Washington, Oregon, Massachusetts and Vermont — and others are said to be considering doing the same.

The ACT regulation steadily raises the percentage of new sales for light-, medium- and heavy-duty trucks in California that must be zero-emission starting in 2024. The rule covers pickup trucks, delivery trucks, short-haul drayage trucks at ports and rail yards, semi-trailer trucks and big rigs.

By 2035, at least 55% of new sales of light- and medium-duty trucks that fall within the Class 2b-3 classification in California must be zero-emission. And at least 75% of new sales for medium- and heavy-duty trucks and semi-trailers that fall within the Class 4-8 classification must be zero-emission, also by 2035. Ultimately, every new truck sold in California must be zero-emission by 2045, according to CARB.

Crowell & Moring LLP partner Bob Meyers, a former principal deputy assistant administrator with the EPA's Office of Air and Radiation, told Law360 that there's already a "bifurcation in the market" as other states consider adopting California's tougher Advanced Clean Trucks standard.

"It's a lot to think about if you're in this business going forward. What's the market going to be? Is it going to be 10 states or 15 states? Is it going to become de facto federal?" Meyers said. "It makes business planning a lot more complicated. If you're in this sector, you've got two different product lines for a while."

California is also currently finalizing a companion set of rules known as the Advanced Clean Fleets regulation, which proposes mandating 100% zero-emission vehicles for government-owned fleets; operators of drayage trucks, which typically transport goods from ports to warehouses; and last-mile delivery trucks by 2035. The proposed Advanced Clean Fleets regulation also wants 100% zero-emission refuse trucks and local buses by 2040, and 100% zero-emission-capable utility fleets by 2040. CARB is expected to vote on adopting the Advanced Clean Fleets regulation later this month.

While the Advanced Clean Trucks regulation addresses the supply question with "a thumb on the scale for manufacturers," the forthcoming Advanced Clean Fleets regulation will address the demand question by compelling operators of large truck fleets to buy electric, according to McWilliams of Squire Patton Boggs.

"The way the Advanced Clean truck rule is structured, it allows companies to focus on the low-hanging fruit first," he explained. "So for the first 10 years, as their technology is developing, many of them have enough diversity in their engine portfolio or their vehicle portfolio that they can start by focusing on electrification of the 'captive' transportation, like the airport shuttles and the fleets that can easily be electrified because their range is limited."

"What California is expecting is that there will be enough of the low-hanging fruit to bridge the gap between current available technology and future available technology," McWilliams added. "But I think that's a bet, that's a gamble. One thing that happens each time there is a significant regulatory push for new engines is the concern or at least cognizance of the incentive that places on truckers to keep old technology on the road longer."

Mindful that there might not be enough zero-emission vehicles available to meet the needs of a particular fleet operator, CARB says it will include certain exemptions in the proposed Advanced Clean Fleets regulation. But experts say it's still not entirely clear how those exemptions will be applied.

"Putting aside the practical issues such as how will the infrastructure possibly be developed during the contemplated timeline and where will the necessary raw materials for all of the necessary batteries arise from, one legal or regulatory issue that immediately presents itself is the nature and application of exemptions under the Advanced Clean fleet program," said Marc Blubaugh, partner and co-chair of the transportation and logistics practice group at Benesch Friedlander Coplan & Aronoff LLP.

He noted that CARB is apparently considering modifying contemplated exemptions in the regulations, which are absolutely necessary to address situations such as if and when an insufficient number of electric trucks are actually available in the market.

"Even if the exemptions are modified to expand the universe of exempt operators, I fully expect that CARB will, as a practical matter, read the exemptions very narrowly and set an extraordinarily high bar for any company trying to establish that it can in fact take advantage of an exemption," Blubaugh

said.

Prasad Sharma, a partner at Scopelitis Garvin Light Hanson & Feary PC, agreed that "CARB is slowly beginning to grapple with the reality of the situation because it's starting to create exemptions for things like lack of vehicle availability or lack of infrastructure."

"[But] instead of trying to deal with these on an exemption-by-exemption basis, a more clear-eyed approach would recognize that their proposed regulatory mandate is just premature," Sharma said.

Separately, CARB is awaiting an EPA waiver decision for its so-called Heavy-Duty Engine and Vehicle Omnibus Regulation setting a series of stricter emission standards, test procedures and other emissions-related requirements for new heavy-duty engines and trucks sold in California starting with model year 2024. That omnibus regulation would require heavy-duty engine manufacturers to develop and deploy new technology to reduce nitrogen oxide, or NOx, emissions initially by 75% and particulate emissions by 50%. Manufacturers also have to comply with different testing cycles and show that the new emissions technology they use are durable for an extended "useful life" period, among other things.

Julie E. Maurer, partner and chair of Lewis Brisbois Bisgaard & Smith LLP's national cargo and logistics practice and its national transportation practice, said an efficient supply chain depends on uniform federal laws, not patchwork state regulation.

"It allows California to enact rules that are significantly tougher than federal requirements, which in theory might work if the supply chain was solely state-specific, which it is not," Maurer said. "The waiver ignores that the trucking industry and the supply chain are not solely intrastate to California. … Allowing California to employ potentially drastic mandates that affect a national and worldwide supply chain can result in dramatic negative effects to consumers, including higher product prices, as well as availability and delivery issues."

Another potential complication is a consolidated challenge in the D.C. Circuit led by Ohio and other Republican-led states, the American Fuel & Petrochemical Manufacturers, and other energy industry groups attacking California's waiver authority. The litigation largely relates to California's authority to adopt its Advanced Clean Car program calling for all new passenger cars, trucks and SUVs sold in the state to be zero-emission by 2035, and raises constitutional questions about the equal sovereignty of states. If the petitioners prevail, that won't bode well for CARB's Advanced Clean Trucks, Advanced Clean Fleets and Heavy-Duty Low NOx Omnibus regulations.

"Uncertainty continues to be a primary concern," McWilliams of Squire Patton Boggs said.

"So if I'm an engine manufacturer, I have to at least sit down with my counsel and say, how likely is it that this is going to withstand challenge, or are we going to get a year down the road of investment only to find that the Supreme Court in its current configuration is now looking at this?'" McWilliams said. "What are the risks that this waiver will be undone, and then where are we?"

Supply Chain and Infrastructure Gaps

The American Trucking Associations, the largest trade group for the commercial trucking industry, has maintained that "national issues deserve national solutions." But California's Advanced Clean Trucks regulation is a set of "technologically infeasible rules on unworkable and unrealistic timelines," that is "sowing the ground for a future supply chain crisis," according to ATA President and CEO Chris Spear.

While there's been increased investment in deploying electric-vehicle charging infrastructure and battery technology, they're not coming online fast enough to keep pace with California's "fanciful arbitrary timelines for transitioning to zero-emission vehicles [that are] divorced from real-world conditions," according to Scopelitis' Sharma.

"There's the need for electricity generation and distribution capacity that far exceeds what exists today," he explained. "Then there's the range limitations associated with existing battery technology — we're a long way off from having that infrastructure in place. I'm not sure the timeline is consistent with the reality on the ground."

According to the environmental policy think tank Center for Climate and Energy Solutions, electrifying the medium- and heavy-duty transportation sector comes with unique challenges such as higher upfront vehicle costs for vehicles and a lack of widespread access to charging and refueling infrastructure. Other challenges include the strain on local electric grids, reduced cargo capacity due to the size and weight of batteries, conflicts between recharging and refueling needs and strict regulations governing truck drivers' hours of service, according to the center.

"Currently, the best applications for battery electric freight trucking are for local/regional trips of up to 250-300 total miles, given the average range of most battery electric Class 8 tractor models available today," the center said in a March report. "The feasibility of long-haul battery electric freight trucking will hinge upon the ultimate availability and accessibility of charging infrastructure (particularly along highways rather than in depots) including whether charging speed and battery range align with the optimal timing of drivers' stops. Proliferation of electric short-haul freight trips could support the build-out of this infrastructure and ultimately enable long-haul applications."

Clark Hill PLC senior attorney Tiffany Hunter told Law360 that strict federal regulations govern commercial truck drivers' rest breaks, how long they can be on the road, and how heavy their truck loads can be. So, bringing more electric trucks into the fold would make compliance extra complicated.

"For the purposes of climate change, it's a great endeavor to have vehicles that are responsible for large emissions be electric and less-polluting, but the problem is it hasn't been proven that, from the business perspective, this can be a viable method of operation," Hunter said. "It's going to significantly increase the length of time for delivery to occur because if it's a long route, they're going to have to stop along the way to charge, which then creates concerns about hours of service. And if these trucking companies are required to have electric vehicles, it's going to impact their ability to haul the goods that they would ordinarily be transferring."

--Additional reporting by Juan Carlos Rodriguez and Keith Goldberg. Editing by Robert Rudinger.