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Via Online Submission at www.regulations.gov

United States Environmental Protection Agency Office of Air and Radiation 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Re: Comments on Request for Waiver of Preemption and Authorization for California's Advanced Clean Fleets Regulation

Dear EPA:

Chevron U.S.A. Inc. (Chevron) appreciates the opportunity to review and comment on the referenced Request for Waiver for Advanced Clean Fleets (ACF). Through ACF, California seeks to mandate that all California fleets transition their working vehicles from internal combustion engines to electric power trains. ACF requires that "large commercial fleets that own, lease, or operate on-road medium-duty and heavy-duty vehicles, and light-duty package delivery vehicles" begin shifting to electric vehicles (EVs) in 2024.¹ Large commercial fleets must begin converting the California fleets to EVs in increasing percentages starting 2025, with 100% of the fleet being EVs by 2035, 2039, or 2042, depending on the truck type.² Covered fleets are private fleets with (1) more than \$50 million in total gross annual revenue and at least one truck in California or (2) 50 or more trucks in California.³

Chevron submits this comment as a fleet owner subject to the onerous requirements of ACF. Chevron has significant operations in California and uses a fleet of hundreds of medium- and heavy-duty vehicles in its California fleet, including heavy-duty pickup trucks, box trucks, tractor-trailers, and many varieties of work trucks. These trucks are used, among other places, at Chevron's Richmond Refinery, El Segundo Refinery, and through the San Joaquin Valley Business unit. These trucks all have internal combustion

¹ California State Motor Vehicle Pollution Control Standards; Advanced Clean Fleets Regulation; Request for Waiver of Preemption and Authorization; Opportunity for Public Hearing and Comment, 89 Fed. Reg. 57,151 (July 12, 2024).

² Clean Air Act § 209(b) Waiver and § 209(e) Authorization Request Support Document Submitted by the California Air Resources Board at 9 (Nov. 15, 2023) ("Waiver Request").

³ Waiver Request at 8.

engines. Given Chevron's business needs and the limitations of medium- and heavy-duty EVs along with its perspective that it will take many technologies to achieve lower carbon policy initiatives, absent ACF's mandate, Chevron has no intention of replacing these trucks with EVs.

EPA should not grant the waiver request. Chevron believes that new policy should provide for a healthier, safer and lower carbon future that supports well-designed climate policy, including broad, market-based mechanisms that address greenhouse gas (GHG) emissions while meeting the world's demand for energy. ACF runs counter to those goals. It introduces new health and safety risks. It fails to appropriately consider ZEVs' full lifecycle GHG emissions, including emissions associated with battery production, electricity generation, and transmission and distribution. It imposes significant compliance costs and carries notable challenges in implementation. And it forces a single technology at the expense of innovative greenhouse-gas solutions for the transportation industry. Among other benefits, a multi-faceted, multi-fuel and power train strategy will likely result in GHG reductions that are comparable to a regulation mandating a single electric requirement for all fleets. These new solutions include use of renewable fuels, such as biodiesel, which have a lower carbon intensity than traditional fuels, can be available on a faster time horizon, and can be used in current truck fleets. Other commenters have elaborated on these points, and Chevron supports those arguments.

Safety and health are our greatest concern. Our unique facilities require safe options to be selected for high-risk operations, and EVs introduce new, inherent and unacceptable risk. EVs' design and road experience over the last decade prove these vehicles are a significant safety risk for many of our operations. Static electricity concerns near a hydrocarbon facility alone are enough to restrict EV usage in our facilities. The frequency and duration of EV battery fires adds another layer of safety concerns. Trucks with multiple batteries could burn for days. This is an unacceptable safety risk near people and processing equipment and could cause force majeure supply disruptions for jet fuel at our major airports and to liquid fuels for drivers.

We have further health and safety concerns. Given the inherent limitations of EVs' space, hauling and charging design, fleets will have to increase the number of trucks to make up for these weaknesses. We've seen that increased weight of EVs increases tire and break dust. This exacerbates concerns about increased traffic and brake dust from trucks on highways near already burdened communities that abut highways. We believe more study is needed on these critical health and safety issues, including the impacts on state and federal highways based on wear and tear of increased, heavier traffic from fleets.

In addition to these concerns, EPA should deny California's waiver request because EPA lacks the legal authority to grant it. Section 209 of the Clean Air Act generally prohibits states from "adopt[ing] or attempting to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines." EPA may waive this preemption for California "if the State determines that the State standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal

⁴ 42 U.S.C. § 7543(a).

standards."⁵ A waiver may not be granted if: "(A) the determination of the State is arbitrary and capricious; (B) the State does not need such State standards to meet compelling and extraordinary conditions, or (C) the State standards and accompanying enforcement procedures are not consistent with" section 202(a) of the Clean Air Act.⁶

California's waiver request does not meet the requirements of section 209. First, a regulation requiring that covered fleet owners convert their existing internal combustion engine (ICE) fleets to EVs is not an emissions "standard" under the Clean Air Act, but an unprecedented ban on a longstanding technology integral to this nation's trucking fleets and the business needs of fleet operators like Chevron. Second, the Clean Air Act gives California the authority to adopt emissions standards to address local pollution problems but not global issues like climate change. Third, California has failed to show that ACF will meaningfully impact local pollution conditions. Fourth, ACF is not technologically feasible: heavy-duty EVs available now or in the near future do not meet business needs, the existing charging infrastructure is woefully deficient, the compliance costs will be exorbitant, and ACF's purported "exemptions" provide no relief to fleet owners. Fifth, ACF is arbitrary and capricious, as California has failed to consider the lifecycle emissions of EVs and has proposed a regulation that would impose an undue burden on interstate commerce.⁷

Chevron submits these comments to elaborate on these legal barriers to California's request.

I. An EV mandate is not an emissions "standard" under the Clean Air Act.

The Clean Air Act permits EPA to grant a waiver for California to implement a "standard relating to the control of emissions from new motor vehicles or new motor vehicle engines." This does not include ACF's mandate that trucking fleets be comprised entirely of EVs.

An emission "standard" is a criteria or requirement that leads to the reduction of emissions. In the context of the Clean Air Act, this means a regulation that demands that an engine "operate more cleanly," such as by requiring that a "vehicle or engine … not emit more than a certain amount of a given pollutant, … be equipped with a certain type of pollution-control device, or … have some other design feature related to the control of

⁵ *Id.* § 7543(b)(1).

⁶ *Id*.

⁷ ACF also applies to off-road yard tractors. Section 209(e)(2) of the Clean Air Act allows California to adopt emissions standards for off-road vehicles, subject to the same waiver requirements imposed for on-road vehicles by section 209(b). 42 U.S.C. § 7543(e)(2). Chevron's arguments for on-road vehicles also apply to off-road yard tractors.

^{8 42} U.S.C. § 7543(a).

⁹ West Virginia v. EPA, 597 U.S. 697, 728 (2022).

emissions."¹⁰ That does not include, however, a regulation that forces trucking fleets to "shift ... from one type of energy source to another."¹¹ The major-questions doctrine prohibits "standard" from being stretched that far.

The major-questions doctrine demands that an agency's power to regulate be understood in light of the statutory context and the limitations on the agency's authority. An agency should be certain to assure itself that "Congress in fact meant to confer the power the agency has asserted." In certain situations, the "history and the breadth of the authority that [the agency] has asserted, and the economic and political significance of that assertion, provide a reason to hesitate before concluding that Congress meant to confer such authority." 13

With ACF, CARB asserts the broad and unprecedented authority to reshape the trucking industry and require fleet owners to abandon their investments in existing powertrain trucks. More than 12 million freight trucks are on the road. These trucks transport the goods that make modern life possible and keep the economy running. And they "are almost exclusively equipped with a diesel or gasoline internal combustion engine." ACF demands that these fleets be shifted from ICE vehicles to EVs, so long as the fleet owner has 50 or more trucks in its national fleet or more than \$50 million in national revenue and operates at least one truck in California. This would upend fleets and the trucking industry, both in California and nationwide. By CARB's own estimate, a mere 0.1% of MDV and HDVs registered in 2021 were EVs. Within two decades, CARB has mandated that this number be 100% for covered fleets. Whether EPA has statutory authority to waive preemption for that sweeping mandate is undoubtedly a major question.

Not only does ACF force companies to shift their entire fleets to EV trucks, but it also demands a complete restructuring of fleet operations. Diesel is readily available at gas stations across the country, and tanks can be filled in 15 minutes or less. In comparison, charging can take hours—if the charging infrastructure will even exist. And EVs are significantly heavier than ICE trucks and so carry less cargo, demanding more trucks and more drivers to transport the same amount of cargo. ACF thus seeks to force "an entirely new approach to refueling" and driving patterns.¹⁷

¹⁰ Engine Mfrs. Ass'n v. South Coast Air Quality Mgmt. Dist., 541 U.S. 246, 253 (2004).

¹¹ West Virginia, 597 U.S. at 728.

¹² *Id.* at 721.

¹³ *Id.* (internal quotation marks omitted).

¹⁴ Am. Transp. Research Inst., *Charging Infrastructure Challenges for the U.S. Electric Vehicle Fleet* at 8 (Dec. 2022), https://tinyurl.com/bdd5ytwz.

¹⁵ *Id*

¹⁶ Waiver Request at 36.

¹⁷ Am. Transp. Research Inst., *Understanding the CO₂ Impacts of Zero-Emission Trucks* at 7 (May 2022), https://tinyurl.com/by43r7bt.

ACF would also require a significant expansion of another sector: electricity generation. A 100% EV trucking industry would consume a total of 553.5 billion annual kWH—"14.0 percent of all electricity consumed in the U.S."¹⁸

The mandate that California seeks to impose is both economically and politically significant. Shifting to EVs would cost fleets—and the broader economy— incredible amounts of money, as explained in detail below. And there is an ongoing vigorous public debate about the role and future of EVs, especially medium- and heavy-duty vehicles. "The basic and consequential tradeoffs involved in such a choice are ones that Congress likely would have intended for itself," not for agency review of a decision by a single state's air quality board. ¹⁹

Given the extraordinary breadth and importance of the claimed assertion of power, CARB "must point to clear congressional authorization for the power it claims" EPA should exercise. ²⁰ There is none. The Clean Air Act allows a waiver for a "standard relating to the control of emissions." ²¹ It says nothing about a wholesale restructuring of the nation's trucking fleets. Just as a "standard of performance" reflecting the "best system of emissions reduction" did not clearly permit EPA to singlehandedly shift the nation's power plants from coal to other energy sources, so too does "standard relating to the control of emissions" fall short of the "clear authorization required by [the Supreme Court's] precedents."

In sum, California is asking EPA to "assert[] highly consequential power beyond what Congress could reasonably have understood to have granted." ²³ "A decision of such magnitude and consequence rests with Congress itself," not with CARB or EPA. ²⁴

II. The Clean Air Act does not give CARB the authority to address a global problem like climate change.

The Clean Air Act permits a waiver for "compelling and extraordinary conditions." ²⁵ Chevron agrees that climate change is a serious issue. But in this statutory context, "extraordinary" refers to unique needs for the particular location, not globalized issues like climate change. The statute's text, operation, and history affirm this. In enacting the Clean Air Act, Congress gave California the option to adopt separate standards to address pollution within its borders, such as smog, not to unilaterally address a global problem

¹⁸ Charging Infrastructure Challenges at 17.

¹⁹ West Virginia, 597 U.S. at 730.

²⁰ *Id.* at 723.

²¹ 42 U.S.C. § 7543(a).

²² Id.

²³ *Id.* at 724.

²⁴ *Id.* at 735.

²⁵ 42 U.S.C. § 7543(b)(1)(B).

best reserved for Congress. ACF is not intended to address local pollution, and so falls outside of the scope of a waiver permitted by the Clean Air Act.

Chevron incorporates by reference the detailed comments on this point submitted by API.

III. California has failed to show a need for ACF.

The Clean Air Act permits a waiver only if California can show that it "need[s] such State standards to meet" localized pollution. ²⁶ But CARB has not shown that ACF would lead to a meaningful improvement in air quality in California. Nor has CARB shown that ACF would "meaningfully address global air pollution problems posed by GHG emissions." ²⁷ Rather, California argues that it has generally shown a need for its own emissions program, as EPA has recognized in the past. But that showing falls short of the Clean Air Act's requirements. Properly read, the Clean Air Act requires that California show a specific need for each standard adopted—not just a generalized need for a separate emissions program. The Clean Air Act scrutinizes individual standards, demanding that "[n]o State . . . shall adopt or attempt to enforce *any standard*" for new motor vehicles. ²⁸ Reading the statute to focus on California's overall emissions program, rather than the particular standard at issue in the waiver, defeats the important limitations placed on California's waiver, as that interpretation would allow California to add essentially any standard it wants—necessary or not—as long as the State claimed that it needs some part of its broader separate emissions program.

Chevron incorporates by reference the detailed comments on this point submitted by API.

IV. ACF is not technologically feasible and so is not consistent with section 202(a) of the Clean Air Act.

California may only receive a waiver if its proposed standards are "consistent with" section 202(a) of the Clean Air Act.²⁹ Section 202(a), in turn, requires that any federal emission standard take effect only "after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period."³⁰ Section 209(b) imposes this same requirement on California's standards.³¹ Put simply, ACF must "be technologically feasible within economic parameters," to "avoid undue economic disruption in the

²⁶ 42 U.S.C. § 7543(b)(1)(B).

²⁷ 84 Fed. Reg. 51,342.

²⁸ 42 U.S.C. § 7543(a) (emphasis added).

²⁹ 42 U.S.C. § 7543(b)(1)(C).

³⁰ 42 U.S.C. § 7521(a)(2).

³¹ *Id.* § 7543(b)(1).

automotive manufacturing industry" and "to avoid doubling or tripling the cost of motor vehicles to purchasers." ³²

It is simply not possible for heavy-duty fleets to comply on California's timeline. Even if they could, the costs of compliance would be far too high. And ACF's exceptions to deal with these realities are ineffective.

A. Heavy-duty EV technology cannot meet business needs.

The technology for heavy-duty EVs falls far short of business needs. CARB speculates that "medium- and heavy-duty ZEVs are commercially available today, and are already capable of meeting the average needs of local and regional trucking operations and a variety of vocational uses." But heavy-duty EVs lack the features necessary to satisfy trucking needs.

For one, EVs do not travel far enough on a charge, and take far longer to charge than ICE vehicles do to refuel, leading to inefficient down times between charges and difficulties with trucking schedules. For instance, a Class 8 diesel truck can drive about 1,200 miles on a full tank—which takes about 15 minutes to fill at a gas station.³⁴ In comparison, current EV trucks can only go 150 to 300 miles on a charge—and that charge takes 10 hours.³⁵ Yet the entire business model for long-haul trucking depends on trucks being able to go much farther between refueling, and lower capacities are not "viable in this segment of the trucking market." California does nothing to grapple with this reality.

Charging aside, the size of the battery makes a heavy-duty EV even heavier. This additional weight decreases the amount of cargo that a truck can carry. As the American Transportation Research Institute has calculated, "[f]or every 1,000 trucks, an additional 343 trucks would be required due to battery weight." This "decrease[s] efficiency, increase[s] traffic congestion, and lead[s] to higher costs and CO₂ emissions." The increased weight also leads to more wear and tear, as "tires wear out faster." Not did

³² Motor and Equip. Mfrs. Ass'n, Inc. v. EPA, 627 F.3d 1095, 1118 (D.C. Cir. 1979); accord 89 Fed. Reg. 57,153 ("California's standards must be technologically feasible within the lead time provided, giving due consideration to costs.").

³³ Waiver Request at 32.

³⁴ Am. Trucking Ass'n, *California's Dream Is Becoming America's Supply Chain Nightmare* (June 12, 2023), https://tinyurl.com/29pe4yzf.

³⁵ Id.; Understanding CO₂ Impacts at 18.

³⁶ Understanding CO2 Impacts at 18.

³⁷ Is California Ready?

³⁸ Understanding CO₂ Impacts at 32.

³⁹ Paul Berger, *Companies Are Balking at the High Costs of Running Electric Trucks*, Wall St. J. (May 8, 2024), https://tinyurl.com/2d4fpdbn.

California properly consider environmental impacts from these increased tire wear particles.⁴⁰

Even if the technology could get up to speed in CARB's accelerated timeline, there could still be insufficient supply of EVs to serve the country's trucking needs. EV batteries require vast amounts of minerals mined in other countries—mining activities that are incredibly expensive and time consuming. Yet California simply speculates that supply can keep up with demand.

B. EV infrastructure cannot support ACF's requirements.

The charging infrastructure for EVs is likewise insufficient. Fleets like Chevron's will need to charge both on site and on the road, and problems arise in both situations.

On-Site Charging: "Fleet owners must figure out how to install chargers at their depots, which they often lease."41 "The engineering and power management is so complex that it takes collaboration with equipment providers, truck makers, utilities, and landlords."42 Unlike passenger vehicles, which are spread out and charge "at home and various stations," fleets of electric trucks "charg[e] at a single location, putting immense strain on the local grid."43 The utility must be willing and able to provide "enough power to the site" for the entire fleet. 44 That is a risky endeavor—Navistar has reported that "one customer had ordered a fleet of electric trucks and installed 20 chargers at its depot," but "couldn't get it energized by the utility."45 And last year, "California utility PG&E told charging provider FreeWire technologies that one of its large fleet customers wouldn't be able to charge trucks for a few years during summer afternoons when California electricity use peaks."46 Current energy demands are already overwhelming California's grid, as utilities have "skimped on grid repairs to prevent rates from surging even more than they have" given the State's push towards widespread electrification. 47 Despite these existing problems, CARB offers no plan for how the state's already vulnerable electric grid is going to support the incredible amounts of electricity demanded by a 100% EV trucking fleet.

 $^{^{40}}$ See https://www.theatlantic.com/technology/archive/2023/07/electric-vehicles-tires-wearing-out-particulates/674750

⁴¹ Jennifer Hiller, *Electric Big Rigs Hit the Streets, But Chargers Are Scarce*, Wall St. J. (July 16, 2023), https://tinyurl.com/3psssur6.

⁴² *Id*

⁴³ Tyson Fisher, *Senate Hearing Exposes Electric Trucks' Immense Strain on Electrical Grid*, LandLine (Aug. 1, 2024), https://tinyurl.com/3f5httx8.

⁴⁴ Waiver Request at 11.

⁴⁵ Jack Ewing, *Truck Makers Team Up to Push for Electric Vehicle Chargers*, N.Y. Times (Jan. 30, 2024), https://tinyurl.com/3fv4tn76.

⁴⁶ Hiller.

⁴⁷ Editorial Board, *Lights Out in La La Land*, WSJ (Sept. 9, 2024), https://tinyurl.com/yvf9hst3.

On-the-Road Charging: The problems are even greater on the road. "There is currently no U.S. network where over-the-road trucks can stop for rest breaks and recharging at the same time." As of this past January, "[o]nly nine fast charging stations in the United States are capable of serving heavy trucks." As another California agency has estimated, "157,000 high powered chargers will be needed by 2030 to support 181,000 medium- and heavy-duty vehicles" in California alone. And California already has a shortage of parking spots for trucks. "Adding a charger at each of California's 13,144 truck parking spaces would cost between \$1.472 billion and \$2.878 billion for just the purchase and installation of the charging units." CARB offers no explanation for where these funds will come from and no back-up plan for when these infrastructure limitations inevitably impair fleet activities.

C. The costs of complying with ACF are undue.

The costs of compliance are also undue. On sticker price alone, heavy-duty EVs are far more expensive than their already-expensive ICE counterparts. For instance, the total annual extra cost to convert from ICE vehicles to EVs is estimated to be \$5,000 for a class 4 van, \$48,000 for a class 6 truck, and \$314,000 for a class 8 tractor trailer. ⁵² CARB's own underestimates confirm this price hike, acknowledging that an EV is "20 percent to 100 percent" more expensive than an ICE truck. ⁵³ There is no assurance that those sticker prices are likely to decrease in the next decade. And that sticker price does not account for other costs over the lifetime of an EV truck. Tires must be replaced more often, and batteries significantly lose their charge after 7 or 8 years. All in, the total annual extra cost to convert to an all-EV fleet in California is estimated to be 56% higher than an ICE fleet. ⁵⁴ For the trucking industry that already operates on "thin" margins, ⁵⁵ the mandatory shift to EVs "would most certainly erase these margins"—"unless the costs can be passed on to consumers." ⁵⁶ Indeed, Ryder estimates that these "increased costs

⁴⁸ Understanding CO₂ Impacts at 15.

⁴⁹ Ewing.

⁵⁰ Resolution 23-13 at 15.

⁵¹ Is California Ready?

⁵² Ryder, *Electric Vehicle Total Cost to Transport Analysis* at 4–6 (May 2024); see *Understanding CO₂ Impacts* (estimating that class 8 diesel truck can cost about \$135,000 to \$150,000, while a new EV truck is about \$450,000); *Charging Infrastructure Challenges* at 27 (pricing an EV truck at \$400,000 to \$500,000).

⁵³ Waiver Request at 42.

⁵⁴ *Id.* at 7.

⁵⁵ Companies Are Balking.

⁵⁶ Charging Infrastructure Challenges at 27.

could cumulatively add approximately 0.5% to 1% to overall inflation."⁵⁷ California does nothing to address this "undue economic disruption."⁵⁸

D. ACF's exceptions do not cure these flaws.

Recognizing this infeasibility, California includes certain purported exceptions in ACF. But these exceptions provide little meaningful relief to fleet owners.

Take the three main exceptions. First, "[t]he ZEV Purchase Exemption allows a fleet owner to purchase a new ICE vehicle of the same configuration as the ICE vehicle being replaced, if the needed vehicle configuration is not available as" an EV. 59 CARB will "maintain a list of vehicle body configurations not available as ZEVs," and "[f]leets may purchase an ICE vehicle type on [that] list without applying for an exemption." This list will not be available until January 1, 2025. Otherwise, "fleet owners can apply for an exemption if they can prove a needed vehicle configuration was not available to serve the primary function for a particular fleet." An application must contain "[w]ritten statements from at least two manufacturers . . . showing that they do not offer the vehicle for purchase as a ZEV or NZEV." Manufacturer preference, or operational needs are not qualifying criteria," however. It is ultimately left to CARB's "good engineering and business judgement" whether the exemption is needed.

Second, "[t]he Daily Usage Exemption allows fleets to *request permission* to purchase an ICE vehicle if the needed vehicle configuration is available as a battery electric vehicle (BEV), but the BEV operating range does not meet the fleet's operational needs." While the ZEV Purchase Exemption is focused on truck configuration, the Daily Usage Exemption is focused on energy capacity. To qualify for the Daily Usage Exemption, the fleet owner must submit the relevant EV's energy capacity and range, "[a] daily usage report for each ICE vehicle of the same configuration," and "[d]escription of daily assignments or routes of existing vehicles of the applicable configurations and explanation of why BEVs cannot be charged during the workday or during driver rest

⁵⁷ Electric Vehicle Total Cost at 8.

⁵⁸ Motor and Equip. Mfrs. Ass'n, Inc., 627 F.3d at 1118.

⁵⁹ Waiver Request at 10.

⁶⁰ Waiver Request at 12.

⁶¹ See CARB, Advanced Clean Fleets Regulation – Zero-Emission Vehicle Purchase Exemption, https://tinyurl.com/ych54fs3 ("Zero-Emission Vehicle Purchase Exemption").

⁶² Waiver Request at 12.

⁶³ Zero-Emission Vehicle Purchase Exemption.

⁶⁴ *Id*.

⁶⁵ 13 Cal. Reg. Code § 2015.3(e)(1)(E).

⁶⁶ Waiver Request at 10.

periods."⁶⁷ "The fleet must already be composed of 10 percent ZEVs to qualify."⁶⁸ And fleets will only have a narrow window of "180 days to make new ICE purchases when approved."⁶⁹ Here too, the fleet owner is at CARB's whim, as the reviewing official will "utilize their good engineering judgement to determine whether" the fleet satisfies the exception.⁷⁰

Third, "[t]he ZEV Infrastructure Delay Extension allows any fleet owner to continue to use ICE vehicles and stay in compliance for the portion of their fleet that is impacted by a qualifying delay in installing [EV] charging or fueling infrastructure" at the company's site "that is beyond the control of the fleet owner." But the electrification project must have been "started one year before the next applicable compliance date for the affected vehicles needing to be replaced." This exception "sunsets in 2030." And once again, the fleet owner must depend on CARB's "good engineering judgement."

As their requirements demonstrate, these exceptions are cold comfort for Chevron and other fleet owners. Each turns on CARB's purported "good judgement" on business and engineering matters. But the California *Air Resources* Board is no expert on the needs and demands of fleets that utilize MDVs and HDVs. The exceptions also set far too high a bar, demanding that a fleet convert to EVs so long as it is not physically impossible for them to do so—costs and operational needs aside. Consider, for example, the ZEV Purchase Exemption. To qualify, a fleet must show there is *no* EV in that vehicle configuration available on the market. So long as there is an EV on the market, the fleet must purchase it, even if it is extraordinarily expensive and does not meet the fleet's operational needs. That hollow exception, like the others, offer no assurance of feasibility.⁷⁵

V. California's determination that ACF is at least as protective of public health and welfare as applicable federal standards is unlawful and arbitrary and capricious.

Finally, EPA may not waive preemption if California's determination that its standards are "at least as protective of public health and welfare as applicable Federal standards" is

⁶⁷ CARB, Advanced Clean Fleets Regulation – Daily Usage Exemption, https://tinyurl.com/3y3zz5n9.

⁶⁸ *Id.* at 12.

⁶⁹ *Id*.

⁷⁰ 13 Cal. Code. Reg. § 2015.3(b)(6).

⁷¹ Waiver Request at 10–11.

⁷² *Id.* at 11.

⁷³ *Id.* at 11.

⁷⁴ 13 Cal. Code Reg. § 2015.3(c)(1)(E).

⁷⁵ California has also failed to provide four-years lead time, as required by section 202(a)(3)(C) of the Clean Air Act. Chevron incorporates API's comments on this point by reference.

"arbitrary and capricious." 42 U.S.C. § 7543(b)(1). Here, California's determination is arbitrary and capricious in at least two respects.

A. ACF fails to consider lifecycle emissions.

First, California has arbitrarily failed to consider the lifecycle emissions of EVs. CARB reasons that, because EVs "emit no tailpipe pollution," an EV mandate is "protective of public health and welfare."⁷⁶ But tailpipes are not the only source of emissions. Significant emissions result from the production of EVs, in no small part due to the carbon-intensive minerals that have to be mined. Indeed, studies have shown that producing an ICE vehicle results in 74,728 lbs of CO₂, and producing an EV results in a substantially higher 478,055 lbs of CO₂. Emissions also result from the production of the electricity needed to power EVs.⁷⁸

Despite this, CARB did "not account for upstream emissions associated with producing and delivering the fuel or energy source to vehicles" or producing the EVs. 79 Criticized for this failure by commenters, CARB responded that it had "qualitatively analyz[ed] the upstream impacts" and concluded that they did not outweigh the reduced tailpipe emissions. 80 As CARB readily admitted, it "did not commission a life-cycle emissions analysis" for ACF. 81 "[N]o such analysis is necessary," CARB asserted, as "[n]umerous studies have shown" that EVs have a lower "lifecycle GHG reduction potential." 82 Specifically, CARB claims "electricity has lower upstream emissions than gasoline or diesel." And "upstream and manufacturing emissions are expected to decline over time as the carbon intensity of the California grid continues to decline." Glaringly, CARB cites no studies to support these bald conclusions.

This qualitative speculation is no substitute for quantitative analysis. The little quantitative analysis that CARB performed—without showing its work—simply estimated the overall "well-to-tank" reductions from the rules.⁸⁵ That generalized estimate is a far cry from the

⁷⁶ Waiver Request at 24; see Resolution 23-13 at 10.

⁷⁷ Understanding CO₂ Impacts at 19.

⁷⁸ See Am. Transp. Research Inst., *Is California Ready for an Electric Vehicle Future*? (Dec. 18, 2023), https://tinyurl.com/ycxpcce6.

⁷⁹ Resolution 23-13 at 24.

⁸⁰ Response to Comments on Draft Environmental Analysis at 66 (emphasis added).

⁸¹ Response to Comments on Draft Environmental Analysis at 18.

⁸² *Id*.

⁸³ Id. at 20.

⁸⁴ *Id.* at 20; *see also* Final Environment Analysis at 38 (blankly asserting that "emission reductions from use of electricity" will decrease "[a]s grid power electricity becomes cleaner over time").

⁸⁵ See Response to Comments on Draft Environmental Analysis at 66.

U.S. Environmental Protection Agency Page 13 September 16, 2024

far more detailed analysis that EPA has recognized is essential to support its own rules.⁸⁶ Because CARB has utterly failed to consider the full environmental impacts from ACF, its determination that ACF is protective of public health and welfare is arbitrary and capricious.

B. ACF imposes an undue burden on interstate commerce.

Second, California's determination is arbitrary and capricious because California lacks the constitutional authority to impose the standards in ACF. Under the Dormant Commerce Clause, "the burden imposed on [interstate] commerce" must not be clearly excessive in relation to the putative local benefits." Here, ACF imposes an undue burden on interstate commerce, affecting fleets across the country so long as they have a single truck in California and \$50 million in revenue, or 50 or more trucks in California. And these onerous burdens offer no local benefits, as California has not shown that ACF will improve local air quality. Indeed, California's intent to regulate conduct outside its borders is clear from ACF's thresholds for qualifying fleets, which focus on the size of a company's *national* truck fleet, not on those fleets' impact on air quality in California.

Chevron incorporates by reference the detailed comments on this point submitted by API.

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As a covered fleet owner, Chevron believes that an approach that embraces multiple forms of technologies is critical to achieving climate and air-quality goals. And Chevron continues to take actions that attempt to help lower the carbon intensity of its operations while meeting the world's demand for energy. But California's attempts to force a wholesale shift from ICE vehicles to EVs is unlawful. EPA should thus deny a waiver for ACF.

Thank you for providing this opportunity to comment on California's Request for a Waiver for ACF. If you have any questions regarding our comments, please contact me.

Sincerely,

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 86 Compare, e.g., 89 Fed. Reg. 28,009–12 (EPA specifically analyzing CO2, NOx, and PM2.5 emissions from electricity generation).

⁸⁷ Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970); see Nat'l Pork Producers Council v. Ross, 598 U.S. 356, 403 (2023) (Kavanaugh, J., concurring in part) ("In today's fractured decision, six Justices of this Court affirmatively retain the longstanding *Pike* balancing test for analyzing dormant Commerce Clause challenges to state economic regulations.").