

MANUFACTURING, FLEET, & DEALER IMPACT

REGULATORY ROADMAP

NAVIGATING TRANSPORTATION REGULATIONS

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2019 LAWRENCE R. KLEIN BLUE CHIP AWARD WINNER

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**For your convenience, the most recent updates have been highlighted*

Since President Trump's inauguration, he, his administration, and Congress haven't wasted any time propelling a new agenda for transportation regulations. On day one, Trump issued an executive order, Unleashing American Energy. It is a wide-ranging and specific order calling for the end of "EV mandates," terminating related CA emissions waivers and halting IRA funding. It also called for a review of the EPA's 2009 Endangerment Finding (that GHGs threaten the public health and welfare of current and future generations) that requires the EPA to take action to curb GHG emissions. With this call to action, things in the nation's capital have been off to a quick start. Whether you're a manufacturer, dealer, fleet, or logistics provider, staying ahead of these shifting policies is crucial. The road ahead may be uncertain, but understanding the risks and opportunities now will help you navigate it successfully. That's where this report comes in. Businesses across the trucking industry need to understand both the rules that are already in motion and the possible disruptions ahead. Whether the administration fully repeals, modifies, or delays key regulations, the impact on equipment decisions, fleet planning, and operational costs will be significant. This report provides a clear breakdown of the current regulations, the potential paths forward, and what industry stakeholders should be considering to stay prepared. This brief lays out the key regulations impacting the trucking industry today, what we know about potential changes, and the critical unknowns that could reshape compliance requirements. Whether you're a manufacturer, dealer, fleet, or logistics provider, staying ahead of these shifting policies is crucial. The road ahead may be uncertain, but understanding the risks and opportunities now will help you navigate it successfully.

FEDERAL ACTIONS

Funding Freeze: President Trump's attempt to freeze federal funding via executive order (without congressional approval) has been blocked by a US District Judge, extending a temporary order issued in January. The Trump administration may now appeal the ruling. Judge John McConnell wrote in his original ruling, "The Executive's categorical freeze of appropriated and obligated funds fundamentally undermines the distinct constitutional roles of each branch of our government." This is a key decision for many programs, but notably for the industry, it means funding under the IRA or IJA can not be withheld where it has been "obligated" as part of a binding agreement between the DOT and the recipient.

CARB Waiver Review: On April 2, the House and Senate introduced joint resolutions of disapproval to overturn the three waivers. The Government Accountability Office (GAO) has determined twice over the last few years, and the Senate parliamentarian reaffirmed more recently, that waiver determinations are not subject to congressional approval under the Congressional Review Act (CRA) because they are not agency rules. The Senate parliamentarian also required 60 votes to pass in the Senate, instead of the simple majority usually required under the CRA, due to the unusual nature of proceedings. Regardless, the House and Senate (ignoring the parliamentarian's determination and using only simple majority) opted to vote in favor of the resolutions. Now, all three resolutions have been signed by the president. This means that, effectively, the waiver determinations are rescinded.

Because waiver determinations are not rules (per the parliamentarian and GAO), therefore not subject to the CRA, and there is no historical precedent of an EPA waiver determination ever being sent to Congress for approval, this will all end up tied up in the courts. CARB filed a lawsuit challenging the resolutions the same day they were signed.

Transportation Freedom Act: The Transportation Freedom Act (SB 711) tackles issues related to auto workers and passenger vehicle regulations, but most importantly for the CV industry, it takes aim at GHG-3 and California waivers. The bill would attempt to repeal GHG-3, though that rule falls outside of the time constraints for a direct repeal under the Congressional Review Act. The bill was introduced on February 25 and has been referred to the Senate finance committee.

The bill would require the EPA to develop new GHG-3 standards that reflect achievable technological advancements based on affordability and market readiness, and rely on evidence from industry market data and

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expert feasibility assessments. While the new rules would be developed, this bill states that the MY 2024 standards under GHG-2 would be the prevailing standards. This bill does *not* attempt to repeal or change the EPA's 2027 low-NOx rule.

The Transportation Freedom Act also contains a major upheaval to the Clean Air Act, and California, should it pass. The bill would amend the Clean Air Act to include a paragraph stating that no further waivers would be granted for any rules on vehicle emissions that differ from federal rules. It would revoke any waivers issued prior to the enactment of the bill, which would include things like Advanced Clean Trucks and HD Omnibus. The bill would also amend the Clean Air Act by repealing Section 177, which allows other states to adopt California's emissions standards instead of federal standards. This would be a major overhaul of a long-standing authority for California to set its own vehicle emissions standards based on the unique air quality problems in the state.

EPA to Reconsider GHG-3 and 2027 HD Low Nox: On March 12, the EPA announced it would reconsider the GHG-3 rule. The rule is likely to see a complete overhaul. The EPA also stated that it would "reevaluate" the 2027 HD low-NOx rule. We expect that reevaluation may primarily impact the useful life and warranty standards expected to significantly increase the price of trucks in 2027.

EPA GHG PHASE 3

Most Recent Updates

As previously discussed, GHG-3 is facing change under the current administration. Trump's executive order, the Senate's Transportation Freedom Act, and the EPA's plans to review the rule all mean one thing: GHG-3 will eventually cease to exist in its current form. Rulemaking is typically a slow process, so it will be some time before we know just what the new standards will be. But we can certainly expect less stringency as the aim of the Trump administration is to undo "EV mandates."

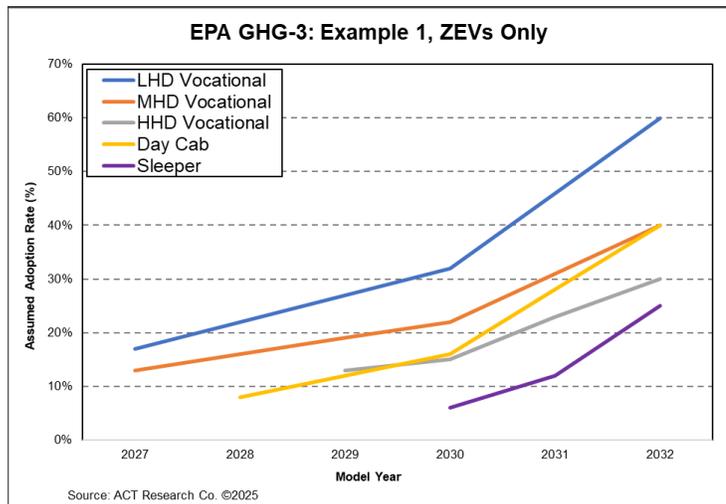
Summary

The EPA's GHG emissions standards have become steadily more stringent over the years and will continue to do so through MY 2032+ per the EPA's GHG-3 standards (finalized in April 2024). Though these standards will change under the new administration, this section covers the rule as it stands for reference.

What does EPA GHG Phase 3 mean for the industry?

The Biden EPA was adamant that GHG-3 is not a ZEV mandate, though many in the industry are concerned that the stringency of the standards implies just that. The EPA provides a variety of examples of possible compliance pathways. In the most aggressive compliance example, the EPA shows what compliance would look like should manufacturers choose to comply using *only* ZEVs from Model Year (MY) 2027-MY 2032 (see adjacent chart).

Since the final rule was published, several states and entities have filed lawsuits over GHG-3 in the D.C. Circuit Court of Appeals. Under the new administration, these petitioners could see their problem (current GHG-3) solved (changes to GHG-3) before a judge is able to make a formal decision.



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What does EPA GHG Phase 3 (as is) mean for you?

Manufacturers	GHG-3 compliance would be challenging and could mean lower overall sales if an insufficient number of ZEVs, H2-ICE, hybrids, or NG CVs can be sold alongside traditional diesel-ICE CVs. While GHG-3 has generally been considered a tough ask, especially in the HD space, manufacturers like regulatory stability. GHG-3 may have the grim reaper in sight in the short term, but there is no guarantee that the next administration won't want to reinstate it. Seesaw rulemaking is precisely what OEMs do not want. Product planning and development are informed by requirements defined by federal rules, and the expectation that those rules will be generally consistent over time.
Dealers	Dealers would have to consider inventory management, especially in the later years of the rule when fewer diesels would be sold. The Trump administration pull-back should make dealers happy to not have to worry about diesel allocation constraints when GHG-3 would start to restrict diesel sales.
Carriers and Fleets	While the GHG-3 will undoubtedly become less stringent (if not entirely retracted), traditional diesel-ICE vehicles will eventually become a declining percentage of the sales mix. The Trump administration's actions will likely not be a forever change as the next administration could regulate CV GHG emissions more stringently again or increase stringency for later years. The time to start thinking about alternatively powered vehicles is still sooner rather than later. The addition of non-diesel vehicles may not happen in your fleet right away, but think about what planning should start so that your business is prepared when the time does come.

EPA 2027 HD LOW NOX RULE

Most Recent Updates

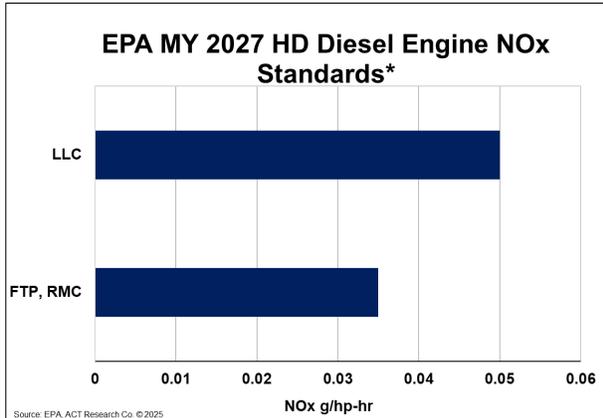
While there haven't been any recent changes, this rule is often part of the discussion when considering the Trump administration's agenda. This rule has not yet been a direct target of the Trump administration, so we consider it "stickier" than GHG-3. That is, it has been finalized longer, and is less offensive to its detractors, than GHG-3, so at this point it has a higher likelihood of survival. The EPA announced in March that it would "reevaluate" the rule, though at this point it is unclear exactly what this entails. If this administration does decide to make changes to the EPA Low NOx rule, we would expect those changes to come in the form of amending the new warranty and useful life (UL) standards.

Summary

As part of the EPA's Clean Trucks Plan, on December 20, 2022, the EPA posted a final rule, "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards," that set NOx and PM emissions reduction standards (the "EPA Low NOx rule"). The EPA Low NOx rule sets more stringent NOx and PM standards for MY 2027+ heavy-duty engines. The EPA's 2027 rule will require a NOx reduction of over 80% from current standards.

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What does EPA HD Low NOx mean for the industry?



*Values do not include the .015 g/bhp-hr in-use compliance allowance

It is the combination of the new NOx emissions stringency, the increased UL, and the increased warranty period that result in significant costs added to the diesel purchase price (~\$20k-\$30k). Tariffs and general economic uncertainty have led ACT Research to stop forecasting a prebuy ahead of 2027.

The adjacent chart shows the EPA's MY 2027 NOx standards for heavy-duty engines.¹ Along with the new NOx emissions standards, the EPA has updated useful life (UL) and warranty periods. The tables below detail the emission-related warranty periods and updated useful life standards for engines compared to the current standards.

Primary Intended Service Class	Current			MY 2027+		
	Miles	Years	Hours	Miles	Years	Hours
SI HDE	110,000	10	-	200,000	15	10,000
Light HDE	110,000	10	-	270,000	15	13,000
Medium HDE	185,000	10	-	350,000	12	17,000
Heavy HDE	435,000	10	22,000	650,000	11	32,000

Primary Intended Service Class	Current			MY 2027+		
	Miles	Years	Hours	Miles	Years	Hours
SI HDE	50,000	5	-	160,000	10	8,000
Light HDE	50,000	5	-	210,000	10	10,000
Medium HDE	100,000	5	-	280,000	10	14,000
Heavy HDE	100,000	5	-	450,000	10	22,000

Source: ACT Research Co. ©2025

What does EPA HD Low NOx (as is) mean for you?

Manufacturers	With economic uncertainty at an all-time high as Trump tariff policy seesaws, ACT Research is no longer forecasting a prebuy ahead of 2027. Market uncertainty along with uncertainty around what the rule will look like should the administration make amendments during its "review" mean manufacturers face planning challenges
Dealers	As dealers are the ones selling the vehicles for the OEMS, they can no longer expect higher than usual sales in the next couple of years ahead of the rule.
Carriers and Fleets	The EPA Low NOx rule doesn't mandate the type of powertrains that make up your fleet, but it will impact the price of diesel-ICE trucks. As noted earlier, we are expecting the price of a Class 8 truck or tractor to increase around \$20k-\$30k. The coming price increase may or may not change your purchasing decisions in the next few years, but having those discussions now is critical.

CARB HD LOW NOX OMNIBUS (HD Omnibus)

Most Recent Updates

Oregon and Massachusetts have opted to delay enforcement by one year to MY 2026. Vermont has delayed HD Omnibus enforcement by one year to MY 2027.

Delays are currently overshadowed by Congress' choice to use the CRA to overturn the EPA's waiver decision. Now that the president has signed, the waiver is rescinded and the rule is unenforceable. California has already filed a lawsuit to challenge the resolutions. This means that HD Omnibus will likely be tied up in the courts while it is determined whether the use of the CRA in this instance holds up.

Summary

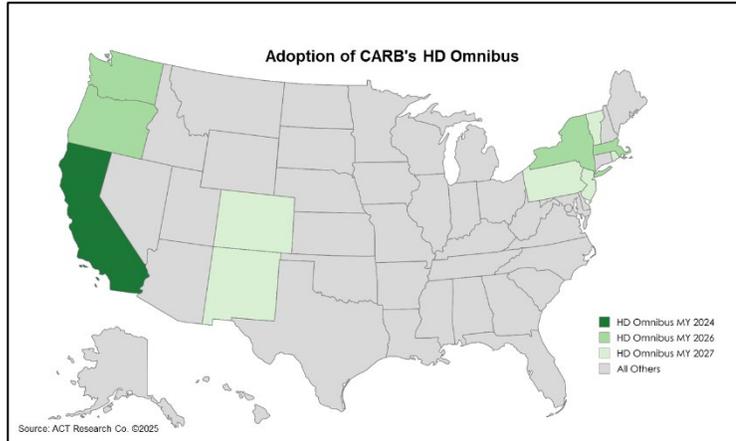
¹ "Heavy-duty engines" under the EPA's Low NOx Rule encompass Classes 4-8. For in-rule specifics where distinction is needed, Classes 4-5 are "light heavy-duty," Classes 6-7 are "medium heavy-duty," and Class 8 is heavy heavy-duty.

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In August 2020, CARB adopted HD Omnibus which lowers NOx and PM emissions standards to 0.05 g/hp-hr for MYs 2024-26 California heavy-duty engines and matches the EPA standards for MY 2027 and beyond. CARB and the Truck and Engine Manufacturer’s Association (EMA) announced the Clean Truck Partnership agreement in July 2023. The Clean Truck Partnership agreement includes CARB’s agreement to amend HD Omnibus MYs 2024-26 compliance pathways and to align with the EPA’s Low NOx emissions standards, among other things.

What does CARB HD Low NOx Omnibus mean for the industry?

Alongside California, nine additional states have proactively adopted the HD Omnibus rule (see adjacent map). Pennsylvania has an existing regulation that would require it to adopt California vehicle emissions standards. However, Pennsylvania put a hold on this requirement and will now follow California’s HD Omnibus standards beginning with MY 2027. The states starting compliance with MY 2027 will effectively be complying with the federal standard set by the EPA that CARB has agreed to align with. CARB will continue to have a separate engine certification program as it will continue to maintain its On-Board Diagnostic and HD in-use compliance program.



What does CARB HD Low NOx Omnibus mean for you (assuming it remains in play...eventually)?

Manufacturers	OEMs are faced with more regulatory uncertainty. While the EPA waiver decision has been overturned by Congress, meaning HD Omnibus is not enforceable, CARB has already indicated it will file a lawsuit contesting the use of the CRA to squash the waivers. There are also questions surrounding the Clean Truck Partnership Agreement in which the OEMs agreed to follow HD Omnibus in California regardless of any challenges to its authority to set its own standards. CARB intends to continue to enforce compliance in California on the basis of that agreement.
Dealers	The confusion surrounding HD Omnibus had California dealers questioning if they would be punished for selling legacy or EPA engines to customers out of state. In early 2024, CARB provided guidance for California dealers grappling with this question—they can sell a non-HD Omnibus compliant engine into other states under certain conditions. With additional states phasing in with MY 2026, additional questions from dealers will likely arise, but hopefully compliant engine availability will increase and no longer be a concern.
Carriers and Fleets	HD Omnibus means more expensive trucks. While we do not expect the same price impact that hits in 2027 when the EPA’s rule comes into play, a 75% reduction in NOx emissions still means additional cost. While the other HD Omnibus states can no longer enforce the rule, since the OEMs agreed to comply in California, fleets in California may still see some price increases.

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CARB ADVANCED CLEAN TRUCKS

Most Recent Updates

In the past few months, multiple states have announced that they will delay ACT enforcement. Massachusetts and Oregon announced two-year delays and will not begin enforcement until 2027. Vermont announced a one-year delay and will now begin enforcement in 2027. Maryland announced a two-year delay, and as it was not set to begin compliance until 2027 in the first place, this means it has pushed out enforcement to 2029.

Of course, all of these announcements are currently overshadowed by Congress' choice to use the CRA to overturn the EPA's ACT waiver decision. Now that the president has signed, the waiver is rescinded and the rule is unenforceable. California has already filed a lawsuit to challenge the resolutions. This means that ACT will likely be tied up in the courts while it is determined whether the use of the CRA in this instance holds up.

Summary

CARB's ACT rule requires OEMs to sell ZEVs as an increasing percentage of their annual sales through 2035+. The table below outlines the gradual increase in sales percentage requirements.

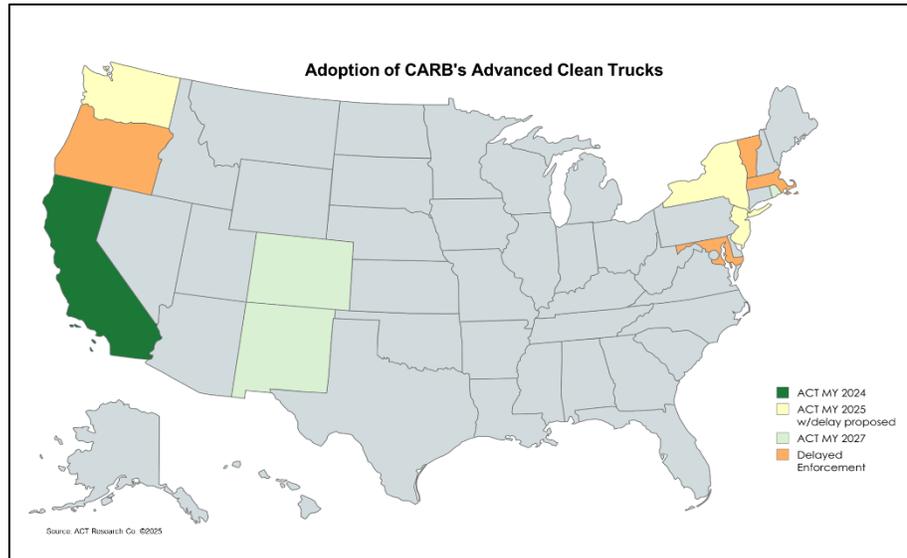
Advanced Clean Trucks ZEV Sales Requirement												
Model Year (MY)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
CL 2b-3 Group	5%	7%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%
CL 4-8 Trucks	9%	11%	13%	20%	30%	40%	50%	55%	60%	65%	70%	75%
CL 7-8 Tractors	5%	7%	10%	15%	20%	25%	30%	35%	40%	40%	40%	40%

Source: CARB, ACT Research Co. © 2025

This regulation allows credit trading. A manufacturer's deficit is the product of the annual sales volume, percent sales requirement, and a weight class multiplier. Deficits for all Classes can be met with ZEV and Near Zero Emission Vehicle credits from other classes. The exception is Classes 7-8 tractors—the deficit calculated for this category can only be met with ZEV and NZEV credits from this group. In addition to California, 10 states have adopted ACT and will phase in through 2027 (see map).

What does CARB ACT mean for the industry?

With challenges like infrastructure, weight limits, and cost competitiveness at top of mind during fleet purchasing decisions, OEMs are likely to struggle selling ZEVs. There is nothing stopping fleets from purchasing compliant diesel vehicles in non-ACT states. Overall CV sales volumes may not change, but the location of those sales could start shifting. While ACT will certainly drive some ZEV sales, the industry faces a lot of moving parts as compliance begins in additional states.



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What does CARB ACT mean for you (assuming it remains in play...eventually)?

Manufacturers	OEMs are faced with more regulatory uncertainty. While the EPA waiver decision has been overturned by Congress, meaning ACT is not enforceable, CARB has already indicated it will file a lawsuit contesting the use of the CRA to squash the waivers. There are also questions surrounding the Clean Truck Partnership Agreement in which the OEMs agreed to follow ACT in California regardless of any challenges to its authority to set its own standards. CARB intends to continue to enforce compliance in California on the basis of that agreement.
Dealers	Congress overturning the waiver decision should alleviate pressure on dealers to sell ZEVs in order to see more diesel CVs. Constraints may continue to persist in California where OEMs have agreed to comply, but the remaining ACT state dealers will see relief.
Carriers and Fleets	Fleets in ACT states (outside of California) should not have problems buying the vehicles they are looking for now that OEMs and dealers do not have to tie ZEV sized strings to diesel sales.

CARB ADVANCED CLEAN FLEETS

Most Recent Updates

CARB withdrew its request for waiver from the EPA in January. This means that CARB cannot enforce the portions of the rule (high priority fleets, drayage, and 2036 ZEV sales requirements) that would have required a waiver. As part of a recent legal settlement agreement, CARB has agreed to formally rescind the ACF rule to ensure clarity for those that would be affected. CARB is still enforcing the state/local public fleet portion of the rule (which does not require a waiver).

Summary

California state and local government agencies of all kinds that own, lease, or operate vehicles with a GVW over 8,500 pounds have to comply. Some exceptions are built in for school buses, emergency vehicles, military tactical vehicles, and snowplows, among others. Purchase requirements for California state and local government fleets are as follows: 50% ZEV required for new purchases from 2024-2026 and 100% ZEV required for purchases beginning 2027. State and local fleets can also permanently opt-in to the “ZEV Milestones Option” that was previously available for High Priority fleets. Federal, High Priority, and drayage fleets no longer need to comply.

CARB 2022 TRU AMENDMENTS

Most Recent Updates

As with Advanced Clean Fleets, on January 13, CARB withdrew its waiver request for the zero-emission (ZE) truck TRU portion of the TRU ATCM rule. While the EPA granted a waiver for the other portions of the TRU ATCM rule at the start of January, it decided to not make any determination regarding the ZE truck TRU portion of the rule at that time. The EPA did not deny a waiver for that portion of the rule, which gave CARB the opportunity to withdraw ahead of Trump’s inauguration and potentially make a re-request in the future when it may face a different EPA.

Summary

CARB adopted rules for TRUs through the TRU Airborne Toxic Control Measure (ATCM). Originally adopted in 2004, the goal of the rule has been to reduce emissions from diesel-powered TRUs. In 2022, CARB approved amendments to further reduce emissions by improving diesel-powered truck TRUs and requiring ZE truck TRUs. By 2029, California was aiming to require all truck TRUs to be ZE. Now, CARB’s waiver request withdrawal for the ZE requirements means that the ZE truck TRU portion of the rule is unenforceable at this time.

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