Briefing: Truck Emissions Regulations — Current, Pending, and Repealed

March 2026

Executive Summary

U.S. truck emissions regulations are defined by a federal framework of active criteria pollutants (NOx and particulate matter) combined with repeal of greenhouse-gas (GHG) and state-level programs.

Key takeaways:

- Federal NOx/PM standards for heavy-duty trucks remain in place for Model Year (MY) 2027.
- EPA rejected ATA petition to delay the NOx rule.
- EPA will consider revisions to warranty and useful-life under the rule.
- Federal GHG standards and California-led state programs have been repealed.

Federal Truck Emissions Mandates

1. NOx and Particulate Matter (PM)

Regulation: *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards* (Final Rule, December 2022)

Statutory Authority: *Clean Air Act* (CAA) §§ 202(a) and 213

Status:

- In force nationwide
- Effective beginning Model Year 2027
- Not dependent on climate policy or the GHG Endangerment Finding

Key Requirements:

- NOx limit: 0.035 grams per brake-horsepower-hour (g/bhp-hr), an ~80% reduction from the prior 0.20 g/bhp-hr standard.
- PM limit: 50% reduction from prior federal standards.
- Expanded test coverage: Includes low-load, idle, and stop-and-go operating conditions, which are especially relevant for refuse, recycling, and other vocational trucks.
- Single-step implementation: Full compliance required beginning MY 2027 (no phase-in).

These standards apply to all new heavy-duty engines and vehicles, regardless of fuel type, and establish a national emissions floor.

Warranty and Useful-Life Requirements on Class 8 vehicles

The Model Year 2027 NOx rule includes extended durability and warranty obligations, which are defined by both mileage and time. These requirements are specified by primary intended service class and include miles, years and engine hour thresholds. For heavy HDE (heavy-duty engines), the following applies:

Emissions-related warranty: 450,000 miles OR 10 years OR 22,000 hours, whichever occurs first.

Useful life (durability period): 650,000 miles OR 11 years OR 32,000 hours, whichever occurs first.

The time-based component was intentionally included by EPA to address low-mileage but long-service vehicles, such as **refuse** and utility trucks, whose emissions controls may deteriorate over time even without high mileage.

EPA has indicated that warranty and useful-life provisions may be revised in a 2026 rulemaking (see ATA petition discussion below).

ATA Petition

In August 2025, the American Trucking Associations, joined by national and state affiliates, formally petitioned EPA to:

1. Delay implementation of the MY 2027 NOx/PM rule until MY 2031.
2. Reopen and reconsider:
    - NOx stringency level,
    - Warranty duration,
    - Useful-life requirements,
    - Related technical provisions.
3. Maintain the existing 0.20 g/bhp-hr NOx standard during the delay.

ATA cited:

- Severe economic conditions in the freight market,
- Significant cost impacts on new trucks,
- Concerns about equipment availability and affordability.

EPA did not issue a formal written denial of the ATA petition to delay the MY 2027 heavy-duty NOx rule. Instead, EPA communicated its decision through official public statements and direct stakeholder

briefings, stating that it will maintain the Model Year 2027 start date and the 0.035 g/bhp-hr NOx standard. EPA has indicated that a limited reevaluation may address programmatic cost drivers, most notably *emissions-related warranty and useful-life provisions*. But emissions limits and timing are outside the scope of reconsideration. The decision not to provide a written denial is consistent with EPA practice where a request does not trigger a statutory reconsideration under the Clean Air Act.

EPA rejected the request to delay or weaken the NOx/PM standards, stating that:

- The Clean Air Act requires EPA to set standards reflecting the greatest achievable emission reduction, considering feasibility and cost.
- The rule already provided more than four years of lead time, meeting statutory requirements.
- Heavy-duty trucks remain a dominant source of mobile-source NOx, with disproportionate impacts on communities near freight corridors.
- Delaying implementation would materially undermine projected public-health benefits.

EPA has committed to:

- Maintaining the MY 2027 start date.
- Maintaining the 0.035 g/bhp-hr NOx standard and PM reductions.
- Considering targeted revisions to warranty and useful-life provisions to reduce cost burdens. EPA plans to propose a rule in spring 2026.

2. Federal Greenhouse-Gas (GHG) Standards (Changed / At Risk) - Heavy-Duty GHG Rule

Regulation: *Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3* (Final Rule, March 2024)

Statutory Authority: *Clean Air Act* § 202(a), triggered by the 2009 GHG Endangerment Finding

Original Status:

- Applied to MY 2027–2032.
- Performance-based, fleet-average CO_2-equivalent standards.
- Designed to drive increasing penetration of zero-emission vehicles over time.

Heavy-duty GHG Phase 3 is no longer in effect.

In June 2025, Congress enacted H.J. Res. 89 which disapproved EPA actions related to both California's Omnibus Low-NOx program and the federal Phase 3 heavy-duty GHG rule. Any remaining ambiguity was eliminated on February 12, 2026, when EPA finalized the rescission of the 2009 Endangerment Finding and formally repealed all vehicle GHG standards, including Phase 3. As a result, there are

currently no federal GHG emission standards applicable to heavy-duty trucks, while federal NOx and PM standards remain fully in force. While EPA's GHG/CO_2 standards have been repealed, NHTSA's separate heavy-duty fuel consumption standards remain in effect.

Heavy-Duty GHG Phase 1 and Phase 2 – Background and Scope

EPA's Heavy-Duty Greenhouse Gas (GHG) Phase 1 and Phase 2 programs established the federal framework for regulating carbon dioxide and other GHG emissions from medium- and heavy-duty vehicles and engines prior to the now-rescinded Phase 3 rule. Phase 1, finalized jointly by EPA and the National Highway Traffic Safety Administration (NHTSA) in 2011, applied primarily to model years 2014–2018 and represented the first-ever national GHG and fuel-efficiency standards for heavy-duty vehicles, covering combination tractors, vocational vehicles, and heavy-duty pickup trucks and vans. Phase 1 set performance-based CO_2 emission standards for engines and vehicles and introduced an averaging, banking, and trading compliance structure tailored to diverse duty cycles. Phase 2, finalized in 2016, expanded and tightened these requirements, covering model years 2018–2027 for most engines and vehicles and, for the first time, establishing standards for trailers. Phase 2 was designed as a technology-advancing program, encouraging improvements in engines, transmissions, aerodynamics, tires, and idle-reduction technologies, while retaining Phase 1's flexible compliance framework. Both Phase 1 and Phase 2 were promulgated under Clean Air Act §202(a) and were explicitly identified by EPA as among the vehicle GHG standards rescinded following the February 12, 2026 repeal of the 2009 Endangerment Finding.

While the rescission of Phase 1 and Phase 2 GHG standards removes EPA's legal authority to enforce those requirements going forward, most of the associated compliance technologies are already fully implemented and commercially normalized. As a result, manufacturers are unlikely to materially roll back these features; the primary effect is regulatory relief rather than product redesign.

State-Level Truck Emissions Programs (Repealed or Blocked)

California Waiver Programs

Prior to 2025, EPA had granted California waivers under CAA § 209 allowing:

- Advanced Clean Trucks (ACT): ZEV sales mandates for manufacturers.
- Omnibus Low-NOx Regulation: Earlier and more stringent NOx requirements than federal law.

In June 2025, Congress enacted the following:

- H.J. Res. 87 (Public Law 119-15): Disapproved EPA's waiver for ACT and related programs.
- H.J. Res. 89 (Public Law 119-17): Disapproved EPA's waiver for the Omnibus Low-NOx rule.

Effect:

- California and Section 177 states may not enforce these programs.
- No state may impose stricter or earlier truck emissions standards than federal law.
- The regulatory landscape reverts to a single national standard for NOx/PM.

Current Regulatory Bottom Line

- Federal NOx/PM standards are stable, nationwide, beginning MY 2027.
- Federal GHG standards and California-driven state programs have been repealed or blocked, though litigation risk remains.
- Warranty and durability obligations extend by both miles and years, explaining member concerns about long-term manufacturer responsibility.
- EPA has explicitly declined to delay or relax emissions limits but may adjust cost-drivers such as warranty duration.

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