Brief in Support of Evaluating Tier 2-Equivalent Criteria Pollutant Standards for On-Road Medium and Heavy-Duty Diesel Engines and Earlier Nonroad Tiers for Off-Road Diesel Engines, Together with a Technology-Neutral Compliance Pathway, in the Tier 4 Postponement, Part 2 Rulemaking

Submitted by: Diesel Freedom Coalition
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INTRODUCTION

This Brief is prepared for the SBA Office of Advocacy to encourage its engagement with EPA in the Tier 4 Postponement, Part 2 Rulemaking. The current rulemaking establishes new multi-pollutant emission standards for model year 2027 and later light-duty vehicles and certain medium-duty vehicles (Class 2b–3). This Brief requests that the SBA Office of Advocacy advocate for EPA to evaluate, as part of this proceeding, whether the criteria pollutant standards applicable to on-road medium- and heavy-duty diesel engines and nonroad diesel engines should also be revised. While the current rulemaking focuses on light-duty and certain medium-duty vehicles, the significant new information discussed below bears directly on the statutory factors EPA must consider under sections 202(a) and 213 of the Clean Air Act, 42 U.S.C. §§ 7521(a) and 42 U.S.C. §§7547

Accordingly, this Brief urges SBA to encourage EPA to evaluate these additional categories of engines as part of developing a complete administrative record in this rulemaking.

Two categories of significant new information have emerged since the existing standards were promulgated. First, in January 2026, EPA changed its approach to monetizing certain health benefits in regulatory analyses. Second, nearly two decades of real-world operating experience have shown that the costs, maintenance burdens, reliability issues, and safety impacts of advanced diesel aftertreatment systems are substantially greater than projected at the time the standards were adopted. These developments are discussed in greater detail in the Statement of Facts below.

This Brief also addresses the relationship between the Part 2 rulemaking and President Trump's June 29, 2026, Presidential Memorandum directing the issuance of guidance within thirty days on emission repairs and related matters. While such guidance may provide near-term relief, it cannot alter the certified configuration required under the current standards. Only by revising the underlying emission standards can removal or reconfiguration of unnecessary aftertreatment hardware become lawful compliance rather than prohibited tampering.

STATEMENT OF FACTS

The current Tier 4 Postponement, Part 2 Rulemaking is expected to address multi-pollutant emission standards for model year 2027 and later light-duty vehicles and certain medium-duty

vehicles. It does not currently appear to address a second category of engines: on-road heavy-duty diesel engines or nonroad diesel engines. This Brief suggests that SBA advocate for EPA to consider, as part of this proceeding, whether the criteria pollutant standards applicable to on-road medium- and heavy-duty diesel engines and nonroad diesel engines should also be revised. While the current rulemaking focuses on light-duty and certain medium-duty vehicles, the significant new information discussed below bears directly on the statutory factors EPA must consider under sections 202(a) and 213 of the Clean Air Act.

The first category consists of the current criteria pollutant standards applicable to on-road medium- and heavy-duty diesel engines used in on-highway motor vehicles, promulgated under section 202(a) of the Clean Air Act, 42 U.S.C. § 7521(a). These standards were strengthened beyond the levels applicable under the earlier Tier 2 program through requirements that depend on advanced aftertreatment technologies, including diesel particulate filters and selective catalytic reduction systems that require Diesel Exhaust Fluid (DEF).The second category consists of the Tier 4 criteria pollutant standards applicable to nonroad diesel engines used in agricultural, construction, and other off-highway equipment, promulgated under section 213 of the Clean Air Act, 42 U.S.C. § 7547. These standards likewise rely on advanced aftertreatment technologies, including systems that require Diesel Exhaust Fluid (DEF), to achieve the required emission reductions.

When these standards were promulgated, the Agency relied upon projections concerning technology performance, durability, capital and operating costs, maintenance requirements, and the monetized value of associated public health benefits. Those projections formed the basis for the Agency's determination that the standards satisfied the statutory criteria, including the requirements under sections 202(a)(3) and 213(a)(3) of the Clean Air Act to give appropriate consideration to cost, energy, and safety factors. Since the promulgation of these standards, two categories of significant new information have become available that were not before the Agency at the time the existing standards were adopted.

In January 2026, EPA determined, in connection with its review of the New Source Performance Standards for Stationary Combustion Turbines, that it would no longer monetize $PM_{2.5}$- and ozone-related health benefits in formal regulatory cost-benefit analyses. The Agency explained that prior methodologies often provided the public with a false sense of precision and that it was no longer sufficiently confident in the underlying models to assign reliable monetary values to such benefits. These categories of benefits had previously constituted the dominant component of the quantified benefits used to justify the post-Tier 2 and Tier 4 standards.

Additionally, nearly two decades of real-world operating experience with advanced diesel aftertreatment systems — including diesel particulate filters and selective catalytic reduction systems that require Diesel Exhaust Fluid (DEF) — have produced extensive data concerning actual compliance costs, maintenance frequency and complexity, system reliability, equipment downtime, automatic engine derating events, no-start conditions, increased fuel consumption

resulting from added weight and regeneration cycles, and safety consequences. This experience includes documented operational challenges associated with DEF handling, storage, refilling requirements, contamination, sensor failures, and cold-weather performance issues. The U.S. Small Business Administration Office of Advocacy has identified EPA's diesel emission standards as among its priority regulations recommended for reform. The Office of Advocacy has explained that these standards raise the complexity of diesel engines, increasing the costs of new engines and maintenance while decreasing engine life and fuel efficiency in the agricultural, construction, and transportation sectors. It has estimated that small businesses could save approximately $13,300 per year for each semi-truck owned, with potential small business cost savings totaling approximately $195 billion. These factual developments bear directly upon the statutory factors that the Administrator should consider under sections 202(a)(3) and 213(a)(3) of the Clean Air Act.

Section 610 of the Regulatory Flexibility Act requires agencies to review rules with a significant economic impact on a substantial number of small entities within 10 years of final promulgation. For the 2001 heavy-duty diesel standards, this review was conducted in 2012.

By the time of that review, the National Automobile Dealers Association (NADA) and other organizations had already submitted detailed data and analyses showing that actual costs, fuel economy penalties, repair frequency, and operational disruptions were significantly higher than the 2000 RIA had projected. NADA's February 2012 study documented that costs for technology integration, calibration, warranties, and maintenance significantly exceeded the original projections, with notable effects on small truck dealerships and fleets. The comments emphasized cumulative burdens on small fleets and owner-operators from elevated repair frequency and downtime affecting time-sensitive freight. EPA summarily dismissed the input provided by the reviewers and said, "…*EPA does not evaluate OEM-applied surcharges in its program cost analyses.*"

Despite these submissions being part of the formal record during the statutorily required 2012 Section 610 review, the process concluded that no changes to the rule were warranted at the time. However, this conclusion was reached even though the stakeholder data already demonstrated clear mismatches between the RIA's central projections and real-world experience on cost, energy, and operational/safety feasibility. The one-time nature of the Section 610 process meant there was no automatic later mechanism to force reassessment when post-2012 evidence continued to accumulate.

The SBA Office of Advocacy's statutory role under the RFA suggests that it may have standing to highlight that the 2012 review received concrete evidence of underestimated burdens yet did not result in adjustments that would better have protected small entities.

ARGUMENT

I. The Clean Air Act Authorizes Revision of the Existing Standards

Section 202(a)(1) of the Clean Air Act, 42 U.S.C. § 7521(a)(1), provides that the Administrator "shall by regulation prescribe (and from time to time revise)" standards applicable to emissions from new motor vehicles and new motor vehicle engines. For heavy-duty vehicles and engines, section 202(a)(3)(A) of the Clean Air Act, 42 U.S.C. § 7521(a)(3)(A), directs the Administrator to establish standards reflecting the greatest degree of emission reduction achievable through the application of technology that the Administrator determines will be available, while giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology. Section 202(a)(3)(B) of the Clean Air Act, 42 U.S.C. § 7521(a)(3)(B), expressly authorizes the Administrator to promulgate regulations revising any standard previously applicable to heavy-duty vehicles or engines, taking costs into account. Section 213(a)(3) of the Clean Air Act, 42 U.S.C. § 7547(a)(3), contains parallel authority for nonroad engines, authorizing the Administrator to "promulgate (and from time to time revise)" standards and requiring appropriate consideration of cost, energy, and safety factors.

Unlike the light-duty vehicle standards governed by section 202(b) of the Clean Air Act, the provisions applicable to medium- and heavy-duty on-road engines and to nonroad engines contain no comparable textual restriction on the Administrator's authority to revise standards when warranted by current information. Following the Supreme Court's decision in Loper Bright Enterprises v. Raimondo, 603 U.S. 369 (2024), courts exercise independent judgment in interpreting statutory text. The plain language of sections 202(a) and 213 of the Clean Air Act authorizes revision of the standards at issue when the statutory factors support such action.

II. The Administrative Procedure Act Requires Consideration of Significant New Information

Under the Administrative Procedure Act, a reviewing court shall set aside agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," 5 U.S.C. § 706(2)(A). In Motor Vehicle Manufacturers Association v. State Farm Mutual Automobile Insurance Co., 463 U.S. 29 (1983), the Supreme Court held that an agency must examine the relevant data and articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made. The Court further held that agency action is arbitrary and capricious where the agency fails to consider an important aspect of the problem before it.

As set forth in the Statement of Facts, two categories of significant new information have emerged since the existing standards were promulgated: (1) EPA's January 2026 determination that it would no longer monetize $PM_{2.5}$- and ozone-related health benefits in

regulatory analyses, and (2) nearly two decades of real-world operating data showing that the costs, reliability problems, maintenance burdens, downtime, and safety impacts of advanced diesel aftertreatment systems substantially exceed the projections relied upon when the standards were adopted.

These developments bear directly on the statutory factors that sections 202(a)(3) and 213(a)(3) of the Clean Air Act require the Administrator to consider - particularly cost, energy, and safety. Because these factors formed part of the original justification for the current standards, EPA should evaluate whether the existing standards remain proper in light of this materially changed record. In particular, EPA should explain whether and how the analytical assumptions supporting the existing standards remain appropriate, especially where real-world compliance costs materially differ from the costs projected at the time the standards were promulgated. A decision to maintain the current standards without adequately addressing the materially changed analytical assumptions and evidentiary record would materially increase the risk that a reviewing court could conclude that the Agency failed to engage in reasoned decision-making under the Administrative Procedure Act.

III. Guidance Issued Pursuant to the June 29, 2026, Presidential Memorandum Cannot Substitute for Standards Revision

On June 29, 2026, President Trump issued a Presidential Memorandum directing the Administrator to issue guidance within thirty days clarifying actions that individuals may lawfully take to conduct emission repairs, expediting alternative certification pathways for aftermarket parts, and considering the deprioritization of civil tampering enforcement against those who in good faith restore vehicles to their original configuration. While such guidance may provide valuable near-term relief, it cannot alter the fundamental legal framework governing compliance. Under section 203(a)(3) of the Clean Air Act, 42 U.S.C. § 7522(a)(3), it is unlawful to remove or render inoperative any device or element of design installed on a motor vehicle or engine in compliance with regulations promulgated under Title II. So long as the applicable emission standards remain at their current levels, the aftertreatment systems - including those requiring Diesel Exhaust Fluid (DEF) - remain part of the certified configuration. Guidance and enforcement discretion cannot change the fact that removal of such systems would, under current standards, constitute prohibited tampering. Only by revising the applicable emission standards themselves can the removal or reconfiguration of aftertreatment hardware that is no longer necessary to meet the revised standards become lawful compliance rather than a violation of section 203(a)(3) of the Clean Air Act. Standards revision therefore constitutes the durable and complete means of advancing the objectives set forth in the June 29, 2026, Presidential Memorandum.

IV. A Technology-Neutral Compliance Pathway Is Consistent with the Clean Air Act and EPA Precedent

The Clean Air Act establishes emission-performance standards rather than directly prescribing perpetual hardware mandates. Sections 202 and 213 require engines and vehicles to satisfy applicable emission standards while affording EPA substantial discretion to prescribe the regulatory mechanisms by which compliance with those standards is demonstrated. Nothing in Sections 202 or 213 requires EPA to permanently prescribe any particular emissions-control technology as the exclusive means of achieving compliance. Rather, those provisions direct EPA to establish emission-performance standards, leaving the Agency discretion to determine the technological means by which compliance with those standards may be demonstrated.

EPA has previously exercised that discretion. In its 2012 emergency-vehicle rule, as reaffirmed and expanded in the 2014 Emergency Vehicle Rule—SCR Maintenance and Regulatory Flexibility for Nonroad Equipment, EPA recognized that strict application of conventional emissions-control requirements could impair the critical operation of fire apparatus, ambulances, and other dedicated emergency vehicles. Rather than exempting those vehicles from the Clean Air Act, EPA preserved the applicable emission standards while authorizing EPA-approved Auxiliary Emission Control Devices (AECDs) for new engines and Emergency Vehicle Field Modifications (EVFMs) for in-use engines. EPA explained that the rule maintains the applicability of the criteria pollutant emissions standards to emergency vehicles, while providing flexibility to manufacturers to design emission control systems that are appropriate for the extreme duty cycles of some trucks.

EPA recently exercised this implementation discretion by authorizing manufacturers to replace traditional Urea Quality Sensors with NOx sensor-based monitoring strategies for certain diesel engines. EPA stated that software updates to implement one or more elements of this guidance may be installed in existing diesel engine products in place of, or to augment, existing UQS-based systems without such action being considered tampering under the Clean Air Act. Although the technological means of demonstrating compliance changed, the revised approach would continue to satisfy the applicable emissions requirements while improving reliability and reducing unnecessary operational burdens associated with UQS failures.

Together, these actions demonstrate that EPA has not treated originally certified hardware configurations as legally immutable. In both cases, the Agency permitted alternative technological approaches where the record showed they could satisfy the applicable emission standards while addressing demonstrated operational problems. Accordingly, should EPA determine that revisions to the criteria pollutant standards for on-road medium- and heavy-duty and nonroad diesel engines are appropriate in this proceeding, it possesses authority to establish a technology-neutral compliance pathway under which owners, operators,

remanufacturers, and aftermarket manufacturers may demonstrate compliance through appropriate testing, certification, or engineering analysis without retaining emission-control hardware - including Diesel Exhaust Fluid (DEF) systems and related components - required solely to satisfy the superseded standards.

Such a framework would preserve the revised emission standards while allowing compliance to be determined by objective emissions performance rather than continued reliance upon legacy hardware configurations. Establishing such a pathway would therefore not represent a novel exercise of EPA's authority. Rather, it would extend the same implementation flexibility EPA has repeatedly exercised where the administrative record demonstrated that alternative technological approaches could satisfy applicable emissions requirements while reducing unnecessary operational burdens.

CONCLUSION

For the foregoing reasons, SBA is encouraged to consider urging EPA to consider, as part of this rulemaking, whether to revise the criteria pollutant standards applicable to on-road medium- and heavy-duty diesel engines and nonroad diesel engines, along with establishing a technology-neutral compliance pathway for in-use engines and equipment. This evaluation should be conducted on an expedited basis so that it may inform both the response to the June 29, 2026, Presidential Memorandum and the final determination in the Part 2 rulemaking.

Respectfully submitted,

Diesel Freedom Coalition