



August 28, 2026

Lee Zeldin, Administrator
U.S. Environmental Protection Agency
EPA Docket Center
Docket No. EPA-HQ-OAR-2026-0728
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OAR-2026-0728, *Proposed rule – Amendments and Nonconformance Penalties for Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement Provisions for SCR-Equipped Diesel Engines*

Dear Administrator Zeldin:

The Northeast States for Coordinated Air Use Management (NESCAUM) and the Ozone Transport Commission (OTC) respectfully submit these comments on the proposed rule titled *Amendments and Nonconformance Penalties for Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement Provisions for SCR-Equipped Diesel Engines*, 91 Fed. Reg. 43154 (July 14, 2026), issued by the U.S. Environmental Protection Agency (EPA) in the above-referenced docket.¹

NESCAUM is the non-profit regional association of state air quality agencies in the Northeast states.² NESCAUM's member agencies have the primary responsibility in their states for implementing programs that achieve the public health and environmental protection goals of the federal Clean Air Act (CAA) and state climate laws. For more than three decades, NESCAUM and its members have collaborated closely with other states, federal agencies, industry, and a wide range of stakeholders to reduce tailpipe pollution from cars and trucks.

Congress created the OTC in CAA §184(a) to advise EPA on ozone transport issues and to address persistent ground-level ozone problems in the Northeast and Mid-Atlantic regions.³ The OTC includes the air quality agencies in these regions and is responsible for developing and implementing initiatives to reduce nitrogen oxides (NO_x) and volatile organic compounds (VOCs), the precursor air pollutants that contribute to the formation of ground-level ozone pollution.

As described in the comments below, heavy-duty vehicles account for 58 percent of ozone-forming NO_x emissions and 52 percent of fine particulate matter (PM_{2.5}) in the NESCAUM and

¹ The proposal is available at: <https://www.govinfo.gov/content/pkg/FR-2026-07-14/pdf/2026-14112.pdf>.

² The NESCAUM states are Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

³ The OTC jurisdictions are Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Virginia. NESCAUM is under contract with the OTC to manage its activities.

OTC states⁴ and we strongly oppose any efforts that will lead to increased emissions of these pollutants. Specifically, EPA's proposal to amend compliance provisions and test procedures related to model year 2027 and later heavy-duty highway engines and vehicles and inducement provisions for selective catalytic reduction-equipped diesel engines. The proposed revisions to emission-related warranty periods, regulatory useful life periods, selective catalytic reduction (SCR) inducements, and allowance of nonconformance penalties (NCPs) would increase ozone-forming NO_x emissions and emissions of PM_{2.5}, hinder the ability of states to attain the National Ambient Air Quality Standards (NAAQS) for ozone, and worsen public health outcomes across the country.

I. Background

Ozone exposure can irritate the respiratory system, reduce lung function, aggravate asthma, damage lung lining, permanently scar lung tissue, and increase the risk of premature death from lung or heart disease. Unsafe ozone levels pose a greater risk to children because their lungs are still developing, and they face higher exposure from spending more time being active and playing sports outdoors; additionally, children breathe faster than adults, causing them to inhale more pollutants relative to their body weight. The elderly are also at increased risk due to age-related changes that decrease their ability to cope with ozone exposure, leading to worsening respiratory and cardiovascular health and reduced cognitive abilities.

As required by the CAA, EPA sets national standards for ground-level ozone and other pollutants, like NO_x and particulate matter, to protect public health and welfare. The CAA is a critical demonstration of cooperative federalism – that is, a partnership between the states and the federal government to make forward, feasible progress toward reducing harmful air pollution. While NESCAUM and the OTC have worked for decades to reduce regional emissions of ozone precursors to attain federal health-based air quality standards, states must rely on EPA to adequately control federal sources of air pollution, including upwind stationary sources and mobile sources, that are either beyond states' jurisdictional control or that states are otherwise preempted from regulating.

EPA's deregulatory agenda⁵ undermines the principles of cooperative federalism that have underpinned the significant achievements in clean air and public health in the United States since the adoption of the 1990 CAA Amendments and will negatively impact air quality and public health. These actions directly contravene EPA's first pillar of providing clean air for every American. Unlike emissions from stationary sources, mobile source emissions are largely under federal control because states are preempted from establishing emission standards for new vehicles and engines. One notable exception, authorized under the CAA and utilized by many states, is the right to adopt and enforce emission standards for new cars and trucks that are

⁴ U.S. Environmental Protection Agency, 2020 NEI Supporting Data and Summaries, <https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries>.

⁵ U.S. Environmental Protection Agency, EPA Launches Biggest Deregulatory Action in U.S. History (March 12, 2025), <https://www.epa.gov/newsreleases/epa-launches-biggest-deregulatory-action-us-history>.

identical to California's standards for which an EPA waiver is granted.⁶ Nonetheless, EPA is intent on rolling back the health and environmental protections afforded by robust emission standards for new vehicles and engines. First, even though California's standards are shown to be a cost-effective measure to reduce ozone-forming pollution, EPA submitted waivers to Congress under the Congressional Review Act (CRA), which resulted in the rescission of the waivers for the most recent set of California emissions standards for cars and trucks,⁷ and prompted litigation over this application of the CRA. Second, EPA has proposed dismantling the federal emission standards for light- and medium-duty vehicles.⁸ And now, EPA is proposing to further weaken the federal program to control emissions from heavy-duty vehicles and engines. The combined impact of these actions is a repudiation of EPA's obligations under the CAA.

II. The significance of heavy-duty vehicle pollution and its impact on nonattainment

In the region covered by the NESCAUM and OTC states, the mobile source sector – including cars, trucks, ships, trains, planes, and other offroad vehicles and equipment used on lawns, gardens, farms, and construction sites – is the greatest contributor to ground-level ozone. While stationary sources of ozone precursor emissions that contribute to interstate air pollution in violation of the CAA's "Good Neighbor" provisions must continue to be addressed, it is not possible for areas in the Ozone Transport Region (OTR) and NESCAUM region to meet national health-based ozone air quality standards without deep pollution reductions from the mobile source sector.

Despite dramatic reductions in ozone pollution in the OTR, the New York City (NYC) metropolitan area fails to comply with both the 2008 and 2015 NAAQS for ozone. This affects over 22 million people living in the NYC Combined Statistical Area (CSA),⁹ including northern New Jersey and over 55 percent of the population of Connecticut,¹⁰ along with roughly 65 million people visiting this area each year.¹¹ Chronically high ozone concentrations compromise

⁶ California Air Resources Board, States that have adopted California's Vehicle Regulations, updated April 2026, <https://ww2.arb.ca.gov/states-have-adopted-californias-vehicle-regulations>.

⁷ See U.S. Environmental Protection Agency, EPA Administrator Zeldin Celebrates President Trump Officially Ending California's Vehicle Waivers, Delivering Another Major Blow to the EV Mandate (June 12, 2025), <https://www.epa.gov/newsreleases/epa-administrator-zeldin-celebrates-president-trump-officially-ending-californias>. See also NESCAUM, Statement on Inappropriate Use of Congressional Review Act on Clean Air Act Waivers (May 22, 2025), <https://www.f.nescaum.org/documents/statement-on-inappropriate-use-of-congressional-review-act-on-clean-air-act-waivers>.

⁸ U.S. Environmental Protection Agency, Revision of Tier 4 Criteria Pollutant Standards, Part 1: Amendments to Phase-In Schedule for Light-Duty and Medium-Duty Vehicles; 91 Fed. Reg. 28463 (May 18, 2026), <https://www.govinfo.gov/content/pkg/FR-2026-05-18/pdf/2026-09905.pdf>.

⁹ U.S. Census Bureau, American Community Survey 1-year estimates, retrieved from Census Reporter Profile page for New York-Newark, NY-NJ-CT-PA CSA (2024), <http://censusreporter.org/profiles/33000US408-new-yorknewark-ny-nj-ct-pa-csa/>.

¹⁰ In Connecticut, the combined populations of the three counties in the severe nonattainment area – Fairfield, Middlesex, and New Haven – account for more than half of the state's total population. Office of the Secretary of State, Population of Connecticut by Counties (visited on August 26, 2026), <https://portal.ct.gov/sots/register-manual/section-vii/population-of-connecticut-by-counties>.

¹¹ In 2024, nearly 65 million people visited New York City alone. Office of the Mayor, Mayor Adams Celebrates Nearly 65 Million Visitors to NYC in 2024, Second Highest Number of Visitors in City History (Dec. 20, 2024)

the health and welfare of the citizens living in the NYC CSA and other parts of the Northeast Corridor. While ozone is largely a summertime issue, NO_x emissions are a year-round problem. NO_x emissions contribute to acid deposition, eutrophication, and visibility impairment in the NESCAUM and OTC regions. During colder seasons, NO_x emissions contribute to the formation of secondary PM_{2.5} through the formation of nitrates.

Heavy-duty vehicles, mostly powered by diesel combustion engines, are a significant contributor to smog-forming criteria pollutants that negatively impact public health. While these vehicles make up less than 6 percent of total onroad vehicles in the U.S., they are responsible for 58 percent of NO_x emissions and 52 percent of PM_{2.5} emissions from onroad vehicles.¹² Heavy-duty vehicles are the largest single source of NO_x emissions in the OTR,¹³ and the OTR faces increased NO_x emissions from heavy-duty vehicles operating outside and traveling through the region. Based on EPA data, the Clean Air Task Force estimates that diesel pollution contributes to approximately 8,800 premature deaths, 3,700 heart attacks, hundreds of thousands of respiratory illnesses, and nearly \$100 billion in monetized health damages annually in the U.S.¹⁴ Annual vehicle miles traveled by heavy-duty vehicles is projected to grow¹⁵ due to rapid growth in e-commerce and rising freight demand. The adverse impacts of heavy-duty vehicle pollution are disproportionately borne by frontline and overburdened communities located near freight distribution hubs, port facilities, and trucking corridors.

The “Heavy-Duty Engine and Vehicle Standards,”¹⁶ adopted in 2022 as part of EPA’s Clean Trucks Plan, promise to deliver significant public health benefits, including greater than 453,000 short tons of NO_x emissions reduction and 20,000 short tons of VOC emissions reduction nationwide in 2045.¹⁷ EPA estimated that the projected NO_x and VOC emissions reductions are equivalent to declines of 48 percent and 23 percent, respectively, relative to the baseline scenario. Further, EPA estimated that these standards would result in \$200 billion in health-

<https://www.nyc.gov/mayors-office/news/2024/12/mayor-adams-celebrates-nearly-65-million-visitors-nyc-2024-second-highest-number-visitors>.

¹² U.S. Environmental Protection Agency, 2020 NEI Supporting Data and Summaries, <https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries>; Federal Highway Administration, Annual Vehicle Distance Traveled in Miles and Related Data – 2024 (1) By Highway Category and Vehicle Type, (updated February 2026), <https://www.fhwa.dot.gov/policyinformation/statistics/2024/pdf/vm1.pdf>.

¹³ U.S. Environmental Protection Agency, 2020 NEI Supporting Data and Summaries, (updated April 15, 2026), <https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries>.

¹⁴ New CATF tool maps the staggering U.S. health and economic damages caused by diesel emissions, Clean Air Task Force, (Jan. 20, 2022), <https://www.catf.us/2022/01/new-catf-tool-maps-staggering-health-economic-damages-caused-diesel-emissions/>.

¹⁵ U.S. Federal Highway Administration, Office of Highway Policy Information, 2025 FHWA Forecasts of Vehicle Miles Traveled (VMT) (September 2025), https://www.fhwa.dot.gov/policyinformation/tables/vmt/2025_vmt_forecast_sum.pdf.

¹⁶ U.S. Environmental Protection Agency, Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards; 88 Fed. Reg. 4296 (Jan. 24, 2023), <https://www.govinfo.gov/content/pkg/FR-2023-01-24/pdf/2022-27957.pdf>.

¹⁷ U.S. Environmental Protection Agency, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, Regulatory Impact Analysis, Table 5-21 (December 2022), <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P1016A9N.pdf>.

related benefits through 2045, by reducing premature deaths, hospital admissions and emergency room visits, cases of asthma onset in children, and lost days of school and work.¹⁸

The final standards adopted in 2022 included extended emissions warranty requirements and longer regulatory useful life requirements to ensure that in-use engines and heavy-duty vehicles meet the emissions standards throughout more of their operational life, which ranges from 251,000-316,000 miles for light heavy-duty engines, 380,000-459,000 miles for medium heavy-duty engines, and 680,000 to 910,000 miles for heavy heavy-duty engines.¹⁹ The final standards also included SCR system inducement provisions to preserve the effectiveness of emission controls in real-world operation. Together, these provisions lock in critical NO_x and VOC emissions reductions and public health benefits for longer engine life durations. EPA's proposed removal of extended emission-related warranty periods, postponement of extended useful life requirements, replacement of requirements for SCR inducements with audible and visible notifications, and introduction of NCPs will increase harmful criteria pollutant emissions over vehicles' useful lives and worsen public health outcomes.

III. EPA's proposal fails to model the emissions and public health benefits

The program finalized by EPA in 2022 to control emissions from heavy-duty engines and vehicles is critical to improving public health outcomes in the U.S., particularly for frontline communities living and working near freight corridors and distribution hubs and exposed to higher levels of diesel pollution. Environmental and public health costs should be of the highest priority as EPA considers its proposal to roll back provisions designed to ensure the emissions standards for model year 2027 and later vehicles will be met over a longer period of time. EPA disregards its clear responsibility to model the extent to which the proposed amendments will adversely impact public health and welfare.

EPA estimates that the proposed removal of extended emission-related warranty requirements would increase NO_x emissions from heavy-duty engines and vehicles by 30,626 tons in 2030 and 36,673 tons in 2055 due to a higher level of age-effects over the heavy-duty vehicle fleet lifespans.²⁰ EPA, citing the limited influence of fleet turnover, projects no emissions impact associated with the proposed three-year delay in the implementation of the extended useful regulatory life requirements. Together, the extended useful life and warranty periods included in the 2022 program, were estimated to reduce NO_x emissions by 18 percent in 2045 due to the decreased likelihood of tampering and poor maintenance after the current useful life of heavy-

¹⁸ U.S. Environmental Protection Agency, Heavy-Duty 2027 and Beyond: Clean Trucks Final Rulemaking, (December 2022), <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101695R.pdf>.

¹⁹ U.S. Environmental Protection Agency, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, Regulatory Impact Analysis, Table 2-11 (December 2022), <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1016A9N.pdf>.

²⁰ U.S. Environmental Protection Agency, Amendments and Nonconformance Penalties for Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement Provisions for SCR-Equipped Diesel Engines, Draft Regulatory Impact Analysis, Table 2-7 (July 2026), <https://www.epa.gov/system/files/documents/2026-06/420d26002.pdf>.

duty engines.²¹ EPA also failed to project emissions impacts associated with the proposed revisions to SCR inducements for heavy-duty diesel engines due to uncertainties related to operator behavior. Further, EPA failed to project emissions impacts associated with the allowance of NCPs due to its inability to accurately project the degree to which manufacturers would make use of the NCPs. EPA's failure to estimate the emissions impacts of its proposed amendments, based on uncertainty about truck operators' and manufacturers' choices, biases its analysis by understating the benefits of the heavy-duty engine and vehicle program finalized in 2022.

EPA's proposal will have far-reaching impacts on public health and welfare that extend beyond the three model years that are directly affected by the postponement of expanded useful regulatory life periods. The proposed removal of extended warranty periods for emission-related controls, replacement of SCR inducements with operator notifications, and introduction of NCPs effectively stymie the production of currently available clean vehicle technologies, discourage future investments in clean vehicle technologies, and give manufacturers the green light to change production plans accordingly. In fact, following review of EPA's proposed amendments, heavy-duty engine manufacturers Cummins²² and PACCAR²³ announced plans to limit production of model year 2027-compliant engines while continuing production of pre-model year 2027 engines and International Motors²⁴ is considering a similar approach. Therefore, EPA must consider, model, and monetize the impact of lost emissions benefits from the delayed implementation of the expanded useful regulatory life, removal of extended warranty, and revised SCR inducement requirements.

EPA cites a concern about epidemiological, economic, and methodological uncertainties as the reason for not monetizing health benefits from reductions in ozone and PM_{2.5} exposures. There is some degree of uncertainty in all elements of a benefit-cost analysis, including the calculation of compliance costs. Reviews of CAA regulations have found that analyses conducted prior to rulemakings consistently overestimated compliance costs due to factors that are difficult to forecast in advance, including technological innovation and fuel costs.²⁵ Moreover, it is well-established that policy itself is what induces technological progress that translates to cleaner, lower-emitting vehicles and energy-saving consumer products being available in the marketplace.²⁶

²¹ 88 Fed. Reg. at 4419.

²² Cummins announces Phased Model Year 2027 Product Launch Plan, Cummins, (July 23, 2026), <https://www.cummins.com/en-na/news/releases/2026/07/23/cummins-announces-phased-model-year-2027-product-launch-plan>.

²³ Keiron Greenhalgh, Paccar to keep selling current heavy-duty truck engines in '27, Transport Topics, (July 29, 2026), <https://www.ttnews.com/articles/paccar-truck-engines-2027>.

²⁴ Keiron Greenhalgh, International mulls phasing in EPA 2027 engine introduction, Transport Topics, (July 24, 2026), <https://www.ttnews.com/articles/tration-earnings-q2-2026>.

²⁵ Dallas Burtraw, "Trading Emissions to Clean the Air: Exchanges Few but Savings Many." Resources for the Future, Winter No. 122 (1996). R. David Simpson, Do regulators overestimate the cost of regulation?, Journal of Benefit Cost Analysis, pages 315-332 (June 2014).

²⁶ Christopher R. Knittel, Automobiles on steroids: product attribute trade-offs and technological progress in the automobile sector. American Economic Review 101(7), pages 3368-3399 (2011); See also: Takahiko Kiso,

Health benefits that are not monetized are effectively weighted as zero, and while there is an uncertainty range in monetized health benefits from reduced exposure to PM_{2.5} and ozone, there is great confidence that those monetized benefits are positive and not zero. For these reasons, we urge EPA to monetize PM_{2.5} and ozone health benefits as in past benefit-cost analyses conducted during the development of CAA regulations. The basis for monetizing those benefits is well-established by robust science that has been thoroughly peer-reviewed and its use in benefit-cost analyses is widely accepted as good economic practice.²⁷ Any uncertainties are within reason for use in rulemakings and doing so is vastly preferable to discontinuing quantification of health benefits altogether, which creates the false assumption that benefits are zero.

IV. Removal of extended emission-related warranty periods would raise operating costs for fleets and disincentive operators from maintaining emission control equipment

EPA's proposal to remove the extended emission-related warranty periods for heavy-duty engines and retain the model year 2026 warranty periods for model year 2027 and later engines would shift emissions system repair responsibilities and costs from manufacturers to fleets and operators. Combined with extended useful regulatory life periods, the extended warranty periods were designed to ensure the final emissions standards would be met through more of the operational life of heavy-duty vehicles. Existing warranty periods, which remained largely unchanged since 1983, are estimated to cover only 22 percent to 54 percent of a heavy-duty engine's useful life, previously five years/100,000 miles.²⁸ The long overdue extended warranty periods included in the 2022 final rule reflect the primary intended service class of vehicles and the improved durability of modern heavy-duty engines. The proposed removal of extended warranty periods would shorten federally-required manufacturer coverage and disincentivize manufacturers from designing more durable emission control technologies such as SCR systems, diesel exhaust fluid (DEF) dosing equipment, exhaust gas recirculation (EGR) components, diesel particulate filters (DPFs), and other emissions-related hardware. Warranties are designed to cover defects in materials and workmanship that cause failure and not to shield manufacturers from having to design more durable components. Rather than requiring engine and vehicle manufacturers to stand behind their products for a longer period of time, EPA proposes to shift responsibility for repair and maintenance of these critical emission control systems once shorter warranties expire to fleet operators, driving up operating costs as trucks age.

"Environmental Policy and Induced Technological Change: Evidence from Automobile Fuel Economy Regulations," Environmental and Resource Economics 74, pages 785-810 (2019).

²⁷ U.S. Environmental Protection Agency, Guidelines for Preparing Economic Analyses (3rd edition). Report number EPA-240-R-24-001. Washington, DC (2024), https://www.epa.gov/system/files/documents/2024-12/guidelines-for-preparing-economic-analyses_final_508-compliant_compressed.pdf; Bryan Hubbell and Alan Krupnik, "How the US Environmental Protection Agency Got It Wrong About Monetizing Benefits of Air Pollution", Resources for the Future (January 2026), https://media.rff.org/documents/Report_26-04.pdf; See also OECD, Mortality Risk Valuation in Policy Assessment: A Global Meta-Analysis of Value of Statistical Life Studies (October 2025), <https://doi.org/10.1787/76ca89a2-en>.

²⁸ 88 Fed. Reg. at 4362.

EPA's proposal to remove the extended warranty periods also disincentivizes operators from properly maintaining emission control systems and increases the potential for tampering, thereby increasing harmful NO_x emissions from heavy-duty engines for a longer duration of their operational life. Extended warranty periods incentivize operators to properly maintain and repair engines and emission control systems to avoid jeopardizing warranty coverage. They also function as a deterrent for tampering because manufacturers would be responsible for emission-related repairs for longer periods of time. In addition, extended warranties encourage manufacturers to design more durable components, simplify repair processes, better train technicians to repair issues, and monitor and report emission-related defects.

EPA's proposal estimates that removal of the extended warranty requirements for model year 2027 and later engines will save the trucking industry up to \$12 billion and assumes, without evidence, that savings of nearly \$6,000 per truck will be passed on to fleets and operators.²⁹ There is no guarantee any potential savings associated with reduced compliance costs will be passed on to operators. In fact, the removal of the extended warranty periods means fleet owners will incur higher maintenance costs to repair vehicles earlier in their operational lives. Most fleet owners already purchase extended warranties³⁰ because heavy-duty engines regularly exceed the model year 2026 emissions warranty mileage limits within one to two years³¹—well short of a vehicle's operational life. The extended warranty requirements scheduled to go into effect in model year 2027 fairly shifted the responsibility for addressing emission control defects to manufacturers for a longer period of time, and now EPA is placing that burden back onto fleet owners and operators.

V. Extended useful regulatory life requirements are feasible

EPA's proposal to delay the extended useful regulatory life periods by three model years is unsupported and unnecessary because the requirements are technologically feasible for model years 2027, 2028, and 2029. Modern heavy-duty diesel engines can achieve low NO_x emissions by integrating a combination of widely used emission control technologies, including DPFs, EGR, SCR with DEF, diesel oxidation catalysts, and advanced high-pressure electronic fuel injection systems.

In support of EPA's 2022 heavy-duty engine and vehicle rulemaking, the Southwest Research Institute (SwRI) demonstrated the feasibility of extended useful life durability for heavy-duty engines beyond 435,000 miles through a testing program based on the Diesel Aftertreatment

²⁹ U.S. Environmental Protection Agency, Amendments and Nonconformance Penalties for Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement Provisions for SCR-Equipped Diesel Engines, Fact Sheet (July 2026), <https://www.epa.gov/system/files/documents/2026-07/420f26012.pdf>.

³⁰ California Air Resources Board, Staff Report on the Warranty Cost Study for 2022 and Subsequent Model Year Heavy-Duty Diesel Engines, (December 2021), https://ww2.arb.ca.gov/sites/default/files/2022-01/warranty_cost_study_final_report.pdf.

³¹ U.S. Environmental Protection Agency, Amendments and Nonconformance Penalties for Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement Provisions for SCR-Equipped Diesel Engines, Draft Regulatory Impact Analysis, Table 2-2 (July 2026), <https://www.epa.gov/system/files/documents/2026-06/420d26002.pdf>.

Accelerated Aging Cycle (DAAAC) protocol.³² As part of this program, SwRI aged a reference engine with aftertreatment emission controls to the full useful regulatory life of 435,000 miles under an industry-led deterioration factor program and evaluated emissions at extended useful life levels. The results demonstrated that low NO_x emissions control systems remained highly effective and could be maintained after 435,000 miles of operation. EPA also conducted its own durability testing to evaluate heavy-duty engine emissions performance after aftertreatments aging equivalent to 435,000, 600,000, and 800,000 miles. EPA's testing results demonstrated that low NO_x emission control technologies experienced only modest deterioration over extended aging periods and remained effective after 800,000 miles of operation.³³

EPA's proposal to delay the extended useful regulatory life periods by three model years presents no concrete evidence that engine and vehicle manufacturers cannot comply with the extended useful regulatory life requirements in model years 2027, 2028, and 2029. As discussed above, there are numerous available technologies widely in use today that can be used to meet lower NO_x standards for a longer duration of a vehicle's operational life. Additional lead time for meeting the extended useful life requirements is unwarranted.

- VI. Replacing engine performance derates for SCR-related inducements with audible and visible notifications will increase NO_x emissions and may encourage tampering with emissions controls

EPA's proposal to replace required engine performance derates for SCR-related inducements with visible and audible notifications will increase NO_x emissions and may encourage tampering with emissions controls. Modern diesel engines rely on exhaust aftertreatment systems that include an SCR system with DEF to meet exhaust emission standards. Selective catalytic reduction systems paired with DEF are a proven, cost-effective technology for achieving emission reductions greater than 95 percent for particulate matter under most operating conditions and 90 percent to 98 percent for NO_x at exhaust temperatures at approximately 250 degrees Celsius.³⁴ Together, SCR and DEF have been widely deployed in highway heavy-duty engines since 2010 and in most off-road equipment since 2014, contributing to a 79 percent NO_x reduction from the two sectors combined.³⁵ In addition, diesel engines equipped with SCR and

³² Sharp, C. (2022). Demonstration of Low NO_x Technologies and Assessment of Low NO_x Measurements in Support of EPA's 2027 Heavy Duty Rulemaking. Southwest Research Institute. Final Report EPA Contract 68HERC20D0014.

³³ Sanchez, J. (2022). *Test results from EPA diesel engine demonstration* (Docket No. EPA-HQ-OAR-2019-0055). U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality, <https://www.epa.gov/system/files/documents/2022-05/epa-hq-oar-2019-0055-1082-docket-memo-testing-2022-05-03.pdf>.

³⁴ U.S. Environmental Protection Agency, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, Regulatory Impact Analysis, (December 2022), <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1016A9N.pdf>.

³⁵ Allen Schaeffer, How SCR and DEF Save Diesel Fuel and Reduce Emissions, Motor, (May 20, 2026), <https://www.motor.com/2026/05/how-scr-and-def-save-diesel-fuel-and-reduce-emissions/>.

DEF are forecasted to reduce fuel consumption by 130 billion gallons between 2011 and 2030,³⁶ generating substantial cost savings to fleets.

If not properly maintained and supplied with high-quality DEF, SCR systems will become less effective in reducing NO_x emissions, which is why onboard diagnostics and inducement strategies are relied upon to encourage timely repair and continued operation. The SCR inducement provisions adopted in 2022 require manufacturers to derate engine performance or initiate an SCR inducement to address concerns with DEF quality, DEF supply, and tampering. These provisions ensure critical emission-related maintenance is performed, including requiring use and timely replacement of high-quality DEF; deter tampering with SCR systems and related emission-control equipment; establish standardized speed-derating schedules that gradually limit vehicle speed if operators fail to address SCR-related problems; provide operators with information about the cause and fix for an inducement; and allow inducements to be cleared while reducing the need for dealer intervention.

EPA's proposal to replace engine performance derates for SCR inducements with audible and visual notifications places greater responsibility on operators to maintain critical emission control systems. As a result, some operators may ignore or postpone emission control equipment repairs and DEF refills, especially as EPA also seeks to scrap extended warranty requirements for this equipment. Repeated audible and visual notifications of emission control malfunction may also encourage tampering with the SCR system, which would lead to increased NO_x emissions. EPA's proposal effectively relies on the timeliness of operators to maintain vital emission controls at the cost of increased pollution to communities.

VII. Nonconformance penalties are not needed and enable manufacturers to pay to pollute

EPA's proposal to make NCPs available would allow manufacturers of medium heavy-duty and heavy heavy-duty compression ignition engines to sell engines that do not fully meet model year 2027 NO_x emissions standards provided they pay a penalty. This amounts to a pay to pollute scheme. In order for EPA to establish NCPs, the following three criteria must be met: (1) the emission standard in question becomes more difficult to meet; (2) substantial work must be required to meet the emission standard; and (3) the Agency finds that a manufacturer is likely to be noncomplying for technological reasons (referred to in earlier rules as a "technological laggard"). EPA fails to justify the need for NCPs and instead cites evidence to the contrary, stating that "...most truck and engine manufacturers have communicated to the EPA that they will have a full lineup of products ready to meet the MY 2027 standards." Further, heavy-duty

³⁶ Engine Technology Forum, Engine Technology Forum Testifies on Advanced Diesel Technology and SCR Systems at EPA Hearing, (July 29, 2026), <https://enginetechnologyforum.org/press-releases/posts/engine-technology-forum-testifies-on-advanced-diesel-technology-and-scr-systems-at-epa-hearing>.

engine and vehicle manufacturers Cummins,³⁷ Daimler,³⁸ International,³⁹ and Volvo⁴⁰ have publicly announced the availability of model year 2027-compliant engines and PACCAR⁴¹ announced their proprietary engines will meet the model year 2027 standard. The aforementioned manufacturers represent the vast majority of heavy-duty diesel engine sales, proving the standards are not only feasible in model year 2027 but are feasible industrywide today.

The proposed introduction of NCPs incentivizes manufacturers to postpone or limit the production of cleaner engines. As mentioned earlier, manufacturers have already announced changes to production plans in response to the proposed amendments, but executives from PACCAR cited the proposed NCPs as a key factor in the company's plans to limit production of model year 2027-compliant engines while continuing to sell pre-model year 2027 engines because the forecasted fine per engine will be lower than the cost to build a compliant engine.⁴² EPA's proposal also describes NCPs as "...a temporary bridge for any companies that need additional time to bring engines into compliance with MY 2027 NO_x standards." EPA does not provide a timeline for the expected duration or phase out of NCPs, which could allow manufacturers to pay penalties for an extended time while deploying engines that fail to meet the model year 2027 NO_x standards, further exposing frontline communities near roadways, ports, and distribution centers to excessive pollution.

VIII. Conclusion

States and the federal government have critical responsibilities under cooperative federalism framework of the Clean Air Act to protect public health and the environment from the impacts of air pollution. EPA's proposed changes to its heavy-duty engines and vehicles program gut the provisions designed to ensure critical NO_x, PM_{2.5}, and VOC emissions reductions and public health benefits for longer engine life durations. If finalized, EPA's proposal will delay the deployment of clean vehicle technologies, increase pollution from heavy-duty vehicles and non-road equipment, and harm the public health and welfare of communities across the country. For these reasons, NESCAUM and the OTC strongly oppose EPA's proposal to amend the extended warranty and useful life periods, SCR inducement, and compliance provisions for model year 2027 and later heavy-duty engines and vehicles.

³⁷ Frequently asked questions on the EPA27 aftertreatment system, Cummins (April 23, 2025),

<https://www.cummins.com/en-na/news/2025/04/23/frequently-asked-questions-epa27-aftertreatment-system>.

³⁸ Detroit introduces its 2027 heavy-duty Gen 6 engines, Daimler Truck North America, (February 19, 2026),

<https://northamerica.daimlertruck.com/news-stories/2026/detroit-introduces-its-2027-heavy-duty-gen-6-engines>.

³⁹ International confirms EPA 2027 readiness with proven S13 Integrated Powertrain, International Motors, (January 7, 2026), <https://news.international.com/2026-01-07-International-Confirms-EPA-2027-Readiness-with-Proven-S13-Integrated-Powertrain>.

⁴⁰ Volvo Trucks unveils its most fuel efficient engine ever, ready to meet new regulations, Volvo Trucks North America, (May 4, 2026), <https://www.volvotrucks.us/news-and-stories/press-releases/2026/may/volvo-trucks-unveils-its-most-fuel-efficient-engine-ever/>.

⁴¹ Keiron Greenhalgh, Paccar Teases Launch of 2 EPA NO_x 2027-Compliant Engines, Transport Topics, (February 11, 2026), <https://www.ttnews.com/articles/paccar-launch-epa-2027-engines>.

⁴² Keiron Greenhalgh, Paccar to keep selling current heavy-duty truck engines in '27, Transport Topics, (July 29, 2026), <https://www.ttnews.com/articles/paccar-truck-engines-2027>.



Sincerely,

A handwritten signature in black ink, appearing to read "Michelle Manion".

Michelle Manion,
Executive Director, NESCAUM

A handwritten signature in blue ink, appearing to read "Paul E. Farrell".

Paul E. Farrell
Chair, OTC Mobile Sources Committee
Director, Planning & Standards Division
Bureau of Air Management,
Connecticut Department of Energy and
Environmental Protection

cc: NESCAUM Directors
OTC Air Directors