



**EPN Comments on Amendments and Nonconformance Penalties for
Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement
Provisions for SCR-Equipped Diesel Engines**

Docket No.: EPA-HQ-OAR-2026-0728

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The [Environmental Protection Network](https://environmentalprotectionnetwork.org) (EPN) harnesses the expertise of more than 800 former Environmental Protection Agency (EPA) career staff and confirmation-level appointees from Democratic and Republican administrations to provide the unique perspective of former regulators and scientists with decades of historical knowledge and subject matter expertise.

These comments address one aspect of the agency's proposal released on July 14, 2026¹: the proposal to replace engine performance derates as part of Selective Catalytic Reduction (SCR) related inducement provisions with visible and/or audible notifications. These proposed amendments for inducements would apply to newly manufactured highway engines and vehicles (i.e., light- and medium-duty vehicles and heavy-duty engines) and in nonroad applications.

Title II of the Clean Air Act (CAA) is designed to require manufacturers to be responsible for ensuring that vehicles will meet emissions standards throughout the life of the vehicle. Vehicle owners' only legal obligation under Title II is to refrain from tampering with emissions controls. This proposal is entirely inconsistent with this fundamental statutory structure because it turns compliance with nitrogen oxides (NO_x) emissions controls into a voluntary decision by owners and operators and—even when there is compliance—reduces the effectiveness of controls through changes to the warranty and regulatory useful life requirements, such that vehicles can no longer be expected to meet emissions standards as long as they are driven (or even for the majority of their time on the road).

Control of NO_x emissions via use of SCR is unique in the Title II regulatory system in that it allows manufacturers to certify compliance using an emission control system whose efficacy depends upon operator behavior. Because of that, it is critical that there be elements of design that have a very high probability of ensuring that the required operator behavior occurs in order to assure that vehicular NO_x emissions are, in fact, controlled. EPA's proposal undermines, and essentially eliminates, any such elements of design. The result is inability to project or conclude that the vehicles will achieve the standard in-use over their useful life.

EPA proposes to replace the present derating regime with short term (90 second) audio and/or visual notifications.² There is no regulatory consequence if the operator ignores the signals—tampering would occur only if the signals were disabled. There is also no physical consequence to the operator for ignoring the notifications. Performance of the vehicle is not affected, and the only financial consequence is the incentive to save money by not refilling the diesel exhaust fluid (DEF).

¹Amendments and Nonconformance Penalties for Model Year 2027 and Later Heavy-Duty Highway Engines and Amendments to Inducement Provisions for SCR-Equipped Diesel Engines, 91 FR 43154 (7/14/2026).

² *Id.* at 91 FR 43198-99.

What EPA is proposing is basically an honor system, without any guarantee or inducement for an operator to refill DEF. The only financial incentive is not to refill. Even companies wanting to comply will be caught in a race to the bottom as competitors gain a price advantage through disregard of the audible and visual signals.

EPA assumes that its new regime will not result in any change in heavy-duty NOx emissions.^{3,4} The agency's sole analytic support for its speculative leap of faith are "two recent studies on the success of visible and audible notifications used to prompt light-duty vehicle drivers to wear seatbelts," which the agency characterizes as showing effectiveness of 90 second audible notifications for inducing drivers to properly latch their seatbelt.⁵

These studies are of no probative value for projecting the effectiveness of the proposed audio/visual notifications. The agency itself points out a number of reasons why: different financial impacts (seatbelt use is free), different risks (physical risk to operator from not wearing a seatbelt versus no risk to operator from not refilling DEF).⁶ This doesn't begin to convey the magnitude of these studies' inappositeness. Buckling a seatbelt is a single, quick action occurring before vehicle operation even commences. The practice has now been socially ingrained for many decades. There is no cost in time or money for seatbelt use, and the operator is at risk of catastrophic injury or death from not doing this simple action. In addition, the operator knows they face the risk of a traffic fine and other possible restrictions on their future driving, given the near universal existence of traffic enforcement. Given these circumstances, of course the response to a visual or audible notification will be to buckle up.

DEF use is nearly the opposite: DEF refills cost both money and time. It requires the operator to get out of their vehicle, and perhaps go to a different location. It may interrupt their trip. There is no physical risk to the operator from not refilling. DEF replenishment is not culturally ingrained. Indeed, when comparing the proposed visual notifications to truck operators for DEF replacement, with a study about similar signaling for seat belt use, the only thing close to comparable is the type of signal. Everything else is clearly and significantly different. There are major differences in the kind of actions to be taken upon the signal, the financial and other incentives for or against taking the actions, the persons receiving the signal, the length of experience and societal acceptance of the need to take the actions, and the existence of enforcement as a deterrence to failure to take the actions. The seatbelt studies consequently evaluate a situation with major substantive differences in every important area involved, compared to the circumstances involving DEF replacement. These differences mean the seatbelt studies have no probative value in predicting or projecting how effective the proposed visual and audio signaling will be in ensuring DEF replacement.

Even given these drastic differences between seatbelt use and DEF refilling, it is worth noting that in the early years of introduction of mandatory seatbelt use, there was drastic non-compliance with any system of

³ *Id.* at 91 FR 43210/2-3

⁴ *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*, pages 9-10, available at <https://www.epa.gov/system/files/documents/2026-06/420d26002.pdf>.

⁵ 91 FR 43198/2.

⁶ *Id.*

operator constraint, be it engine interlock, warning notifications, and ticketing for non-use.⁷ The early years of DEF use appear to be alike.

In fact, according to the proposal, there is a minority view that is frustrated and opposed to the required use of DEF. There is no legal threat to the operator for failure to replenish DEF. Given these facts, it is fanciful to expect that removing hard constraints on vehicle operation without proper DEF in favor of just a warning light will result in anything like continued levels of DEF use, which in turn means the vehicles will not be meeting emissions standards.

Thus, there is no basis for the agency's assumption of compliance using audible and/or visual signals. There will be widespread non-compliance given the lack of regulatory consequence, the perverse incentive to save money by not refilling, and the lack of risk to the operator or vehicle for not refilling.

The number of administrative law violations of this part of the proposal are legion:

- Adopting a standard which is unenforceable, and for which widespread non-compliance is a near certainty, is arbitrary.
- The agency is ignoring an essential aspect of the problem by proposing an unenforceable regime and not considering the resulting consequences.
- The agency is relying on speculation, not evidence; its only analytic support are two studies which have no probative value here.
- Arbitrary failure to consider adverse emission impacts of the proposal based on purported uncertainties.⁸ It is totally unrealistic to assume there will be no non-compliance, as EPA proposes. EPA can easily estimate the emission effects of given degrees of non-compliance, for example 10-50% (which would still be less than non-compliance with seat-belt laws in the earlier years of mandated seatbelt use) and must do so.⁹
- Failure to consider reasonable alternatives. Among the alternatives the agency fails to analyze are the reforms from the 2023 final rule which have not even been tried in practice. The agency also fails to address the obvious alternative of requiring original equipment manufacturers (OEMs) to fix any problems with faulty wiring or sensors giving false positives, or to develop cold weather DEF. These are all issues within OEMs' control, to which the statute assigns OEM responsibility.¹⁰
- Solution in search of a problem. EPA fails to explain why the derating system, which provides for progressive derating over a 164 hour (i.e. a 20 days operating period assuming an 8-hour work day), does not provide sufficient opportunity for DEF replenishment.¹¹ Nor does the agency address why

⁷ See CDC MMWR "Safety-Belt Use Among Drivers Involved in Alcohol-Related Fatal Motor-Vehicle Crashes United States, 1982-89 (1991) and CDC MMWR: Increased Safety-Belt Use — United States 1991, documenting a 51% non-compliance rate among light duty vehicle operators by 1990 notwithstanding safety-belt state law requirements with police enforcement in many of the States.

⁸ See *Motor Vehicle Manufacturers Ass'n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 52 (1983) ("that policymaking in a complex society must account for uncertainty, however, does not imply that it is sufficient for an agency to merely recite the terms 'substantial uncertainty' as a justification for its actions. The agency must explain the evidence which is available, and must offer a 'rational connection between the facts found and the choice made.' *Burlington Truck Lines, Inc. v. United States*, *supra*, 371 U.S., at 168, 83 S.Ct., at 246.").

⁹ See, e.g. *Center for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1198-99 (9th Cir. 2008) (arbitrary for agency benefits analysis to assign zero value for a parameter known to have monetary value).

¹⁰ CAA section 206(a)(3)(A). See, e.g. *Cap. Power Corp. v. FERC*, 156 F.4th 644, 652-53 (D.C. Cir. 2025) (arbitrary and capricious for the agency not to consider and analyze reasoned alternatives, especially those brought directly to the agency's attention in public comments).

¹¹ 40 CFR §1036.111.

OEMs, which are responsible by law for the proper functioning of derating systems, cannot address operational issues of false positives due to faulty wiring and the like by improving their products.¹²

The statutory violations of this part of the proposal are equally glaring. Obviously, a standard for which widespread non-compliance is a virtual certainty does not “reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available.”¹³ The proposal also would result in violations of CAA §203(a)(3)(B), which prohibits “any person¹⁴ to manufacture...or install, any part or component... where a principal effect of the part is to ... render inoperative any device installed ... in a motor vehicle ... in compliance with regulations under this chapter.” The visual and audible notification signals are such a “part or component.” Their effect will be to render inoperative the SCR control system (the “device” installed to achieve the NOx standard) because the signals will not be effective and can and will be ignored without regulatory or physical consequence, and they create financial inducements for not replenishing DEF. Not all operators will ignore the signaling, but it is obvious that a significant percentage of operators will, and this will render the SCR system inoperative.

The proposal ignores implications for vehicle certification. Quite simply, under the proposed regime, there is no way that EPA can validly “determine whether such vehicle ... conforms with the regulations prescribed under section [202].”¹⁵ There will be widespread instances of disregard of notification signals, leading to absolute non-compliance with the CAA §202(a)(3) NOx standards in use. Moreover, those standards must be met throughout the vehicle’s useful life, and the likelihood of disregard grows the longer the opportunity for disregard exists.

To be certified, engines must meet emission standards across their practical adjustable operating range (commencing in model year 2027). 40 CFR 1068.50 (a) states: “The standard-setting part requires as a condition of certification that engines with adjustable parameters meet all the requirements of the standard-setting part for any setting in the practically adjustable range.” EPA must determine that “practically adjustable range” as part of certification testing.¹⁶ An “adjustable parameter” is defined as “any device, system, or element of design that someone can adjust (including those which are difficult to access) and that, if adjusted, may affect emissions or engine performance during emission testing or normal in-use operation.”¹⁷ Here, the level of DEF is an adjustable parameter, going from zero to full. It is totally unrealistic to assume anything other than a significant percentage of vehicle operators will ignore the audible or visual signal leading to failure to replenish DEF. Some will do it once or a few times, others are likely to do it consistently. It is an all-too-likely outcome given the lack of regulatory or physical consequence to the operator, and the financial inducement to do so.¹⁸ The practically adjustable range of operating conditions for the DEF level therefore must include zero. This is what will happen—to some significant degree—in use, and over the vehicle’s useful life, and therefore needs to be included as part of the certification process. Vehicles tested with the SCR system at zero DEF level will fail the standard by enormous

¹² See, e.g. *Nat’l Federation of Federal Employees v. Vilsack*, 681 F.3d 483, 497 (D.C. Cir. 2012) (agency action vacated as an arbitrary “solution in search of a problem” where record evidence does not support the existence of a problem requiring drastic agency action).

¹³ CAA §202(a)(3)(A)(i).

¹⁴ “Person” includes corporations. CAA §302(e).

¹⁵ CAA §206(a)(1).

¹⁶ 40 CFR 1068.150(b)(3).

¹⁷ 40 CFR 1065.1001.

¹⁸ See 40 CFR 1068.150(b)(2) requiring EPA to evaluate “the adequacy of the limits ... inducements, or other means used to limit adjustment ... or ensure replenishment” as part of the certification testing process.

amounts—accurately reflecting what will happen in use under the proposal. As a result, certification of vehicles with these systems installed as the means of assuring compliance with NOx standards is not legally possible. We would expect any certificate of conformity issued for vehicles so-equipped to be challenged as violative of CAA §206.

EPA solicits comments on whether DEF quality should remain an adjustable parameter under 40 CFR 1036.115.¹⁹ This solicitation misses the forest for the trees. The real issue is the range of operating conditions for vehicles which include visual and/or audible signals as the sole means of inducement for DEF replenishment. This range includes zero. Any effort by EPA to sidestep this issue by somehow declaring that the range does not need to be evaluated because DEF is not an adjustable parameter would, again, be fundamentally inconsistent with the legal requirements under Title II for certifying vehicles.

¹⁹ 91 FR 43202.