

Non-Conformance Penalties for Heavy-Duty Diesel Engines Subject to the 2010 NO_x Emission Standard

The U.S. Environmental Protection Agency (EPA) is adopting nonconformance penalties (NCPs) for heavy heavy-duty diesel engines that can be used by manufacturers of heavy-duty diesel engines unable to meet the current oxides of nitrogen (NO_x) emission standard. These penalties, which are assessed on a per-engine basis, allow a manufacturer to produce and sell nonconforming engines upon payment of penalties. The actual penalties reflect how close the engines are to meeting the standard – the cleaner the engines are, the lower the penalties will be.

What are Non-Conformance Penalties?

Non-conformance penalties (NCPs) are monetary penalties that allow a vehicle or engine manufacturer to sell engines that do not meet the emission standards. Under a penalty structure previously established by regulation, manufacturers unable to comply with the applicable standard may choose to pay penalties, which are assessed on a per-engine basis.

The Clean Air Act outlines the key requirements of an NCP program. The Act requires that:

- The penalties increase with the degree of non-compliance with the emission standard and that the penalties increase over time.
- Emissions under an NCP program may not go above an upper limit established by regulation.
- The NCPs remove any competitive disadvantage that might otherwise accrue to a manufacturer that is complying with the standards.

Which Engines and Vehicles are Covered?

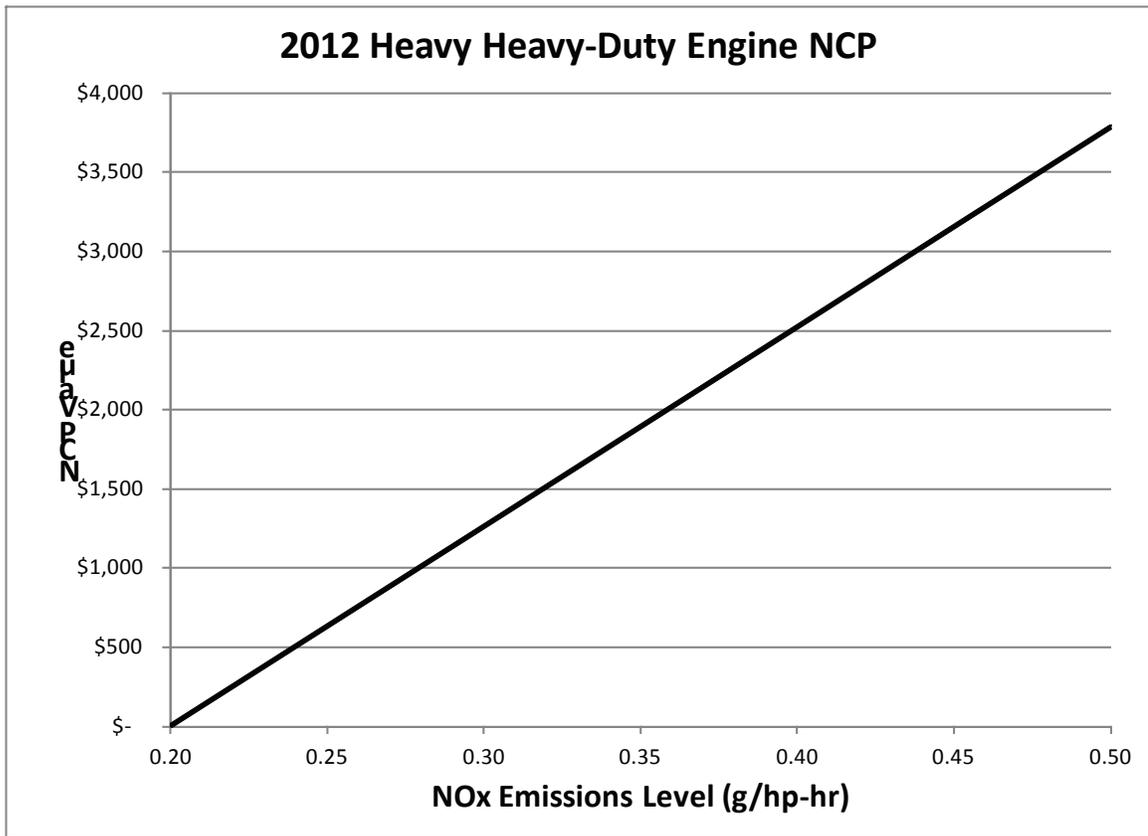
EPA is establishing NO_x NCPs for 2012 and later highway heavy heavy-duty diesel engines. These are the engines used in the largest highway trucks and buses. The standard for these engines is 0.20 grams NO_x per brake-horsepower-hour (g/hp-hr).

Why is EPA Establishing These Penalties?

NCPs were authorized for heavy-duty engines under the Clean Air Act to provide flexibility that fosters long-term improvement in emissions without forcing manufacturers out of the market. A 1985 rulemaking established the three basic criteria for determining the eligibility of emission standards for NCPs in any given model year. First, the emission standard in question must have become more difficult to meet. Second, substantial work must have been required in order to meet the emission standard. Third, a technological laggard must exist or be likely to develop. A technological laggard is considered to be a manufacturer who cannot meet a particular emission standard due to technological difficulties and who, in the absence of NCPs, might be forced from the marketplace. EPA has determined it is appropriate at this time to establish NCPs for this emission standard because these three NCP criteria have been met.

What are the Penalty Levels?

The actual penalties that a manufacturer would pay for each non-complying engine are determined by formulas that already exist in the federal regulations. The Final Rule specifies certain parameters that determine the amount a manufacturer must pay, when used in these formulas, along with the emissions of the engine. Key parameters that determine the NCP a manufacturer must pay are EPA's estimated cost of compliance for a near worst-case engine and the degree to which the engine exceeds the emission standard (as measured from production engines). Engine emissions may not exceed an upper limit designated in the regulations. EPA has established an upper limit of 0.50 g/hp-hr NO_x in this Final Rule. The figure below provides the calculated per-engine penalties up to \$3,775 for emission rates between 0.20 and 0.50 g/hp-hr NO_x for 2012 model year heavy heavy-duty engines. The maximum penalties will increase by several hundred dollars per engine each year for later model years.



How does this Final Rule relate to the Interim Final Rule EPA promulgated in January?

On January 31, 2012 EPA established interim NCPs under section 553(b)(B) of the Administrative Procedure Act. As part of that rule, we committed to replace the interim NCPs with final NCPs after considering public comments on a parallel Notice of Proposed Rulemaking. On June 12, 2012 the U.S. Court of Appeals for the District of Columbia Circuit issued an opinion vacating the Interim Final Rule, ending the availability of the interim NCPs. This Final Rule makes NCPs available again for these engines.

What are the Health and Environmental Impacts?

These NCPs will have a minimal environmental impact. They provide an optional flexibility that fosters long-term improvement in emissions without driving manufacturers out of the market. We cannot predict how many manufacturers would make use of the NCPs, and thus, the specific emission impact cannot be quantified. We expect relatively few engines to be certified under these provisions. Any impacts should be short-term in nature, because the penalties increase over time to discourage long-term use, and because the penalty figures are high enough such that long-term use is not a viable option for the manufacturers.

What are the Total Costs?

NCPs generally have minimal adverse economic impacts. Use of them is optional, and manufacturers will likely choose whether or not to use NCPs based on their ability to comply with emissions standards. Manufacturers that choose to make use of the NCPs will incur those costs, which are based, in part, on the cost of complying with the emission standards. Without NCPs, a manufacturer that has difficulty meeting the standards has only two alternatives: fix the nonconforming engines, perhaps at a prohibitive cost, or not produce/sell them. The availability of NCPs provides noncomplying manufacturers with a third alternative, yet protects those manufacturers that have incurred the costs of complying with the standards.

For More Information

You can access the Final Rule and related documents on EPA's Office of Transportation and Air Quality (OTAQ) Web site at:

www.epa.gov/otaq/hd-hwy.htm

For more information on these and related rules, please contact EPA through EPA OTAQ Public Inquiries at:

www.epa.gov/otaq/oms-cmt.htm