Regulatory Announcement

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

The U.S. Environmental Protection Agency (EPA) is adopting an Interim Final Rulemaking on nonconformance penalties (NCP) for heavy heavy-duty diesel engines while also issuing a Notice of Proposed Rulemaking (NPRM) on nonconformance penalties for both medium and heavy heavy-duty diesel engines that could be used by manufacturers of heavy-duty diesel engines unable to meet the 2010 model year oxides of nitrogen (NOx) emission standard. These penalties allow a manufacturer to produce and sell nonconforming engines upon payment of a penalty. The penalty, which is assessed on a per-engine basis, varies with the certified emission level for the engine family involved.

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 a penalty, which is 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.

EPA United States Environmental Protection Agency

Office of Transportation and Air Quality
EPA-420-F-12-001
January 2012

Which Engines and Vehicles Would be Covered?

EPA is establishing NCPs for the 2010 NOx standard for highway heavy-duty diesel engines. This standard is 0.20 grams per brake-horsepower-hour (g/hp-hr) of NOx. The non-conformance penalties will be available immediately for 2012 and 2013 model year heavy heavy-duty highway diesel engines on an interim basis. We are also taking comment on making them available more permanently and on making them available for 2012 and later medium heavy-duty highway diesel engines.

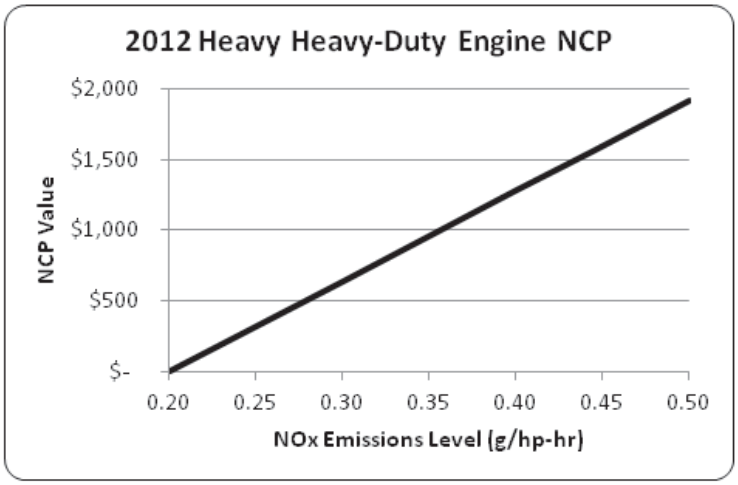
Why is EPA Establishing these Penalties?

NCPs provide flexibility that fosters long-term improvement in emissions without driving manufacturers out of the market. As with past NCP rules, this interim final rule and proposed rule were developed with the assistance of cost information provided by the manufacturers of heavy-duty diesel engines in order to develop the penalty rates.

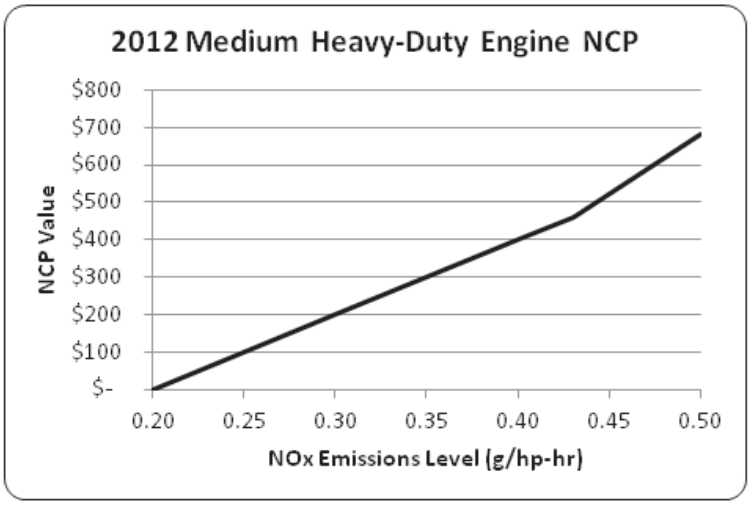
NCPs are authorized for heavy-duty engines under section 206(g) of the Clean Air Act. A 1985 rulemaking established three basic criteria for determining the eligibility of emission standards for NCPs in any given model year. First, the emission standard in question must become more difficult to meet. Second, substantial work must be required in order to meet the emission standard. Third, a technological laggard must be likely to develop. A technological laggard is considered to be a manufacturer who cannot meet a particular emission standard due to technological (not economic) difficulties and who, in the absence of NCPs, might be forced from the marketplace. One manufacturer is currently using NOx credits to certify all of its heavy heavy-duty diesel engines near 0.50 g/hp-hr. Based on its current credit balance and projected sales for this service class, we do not expect this manufacturer to have sufficient credits to cover its entire model year 2012 production. These three criteria have been satisfied with respect to the NOx standard that applies to 2010 and later model year heavy-duty diesel engines. Therefore, it is appropriate at this time to establish NCPs for this emission standard.

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. Both the Interim Final Rule and the NPRM specify certain parameters that, when plugged into the formulas along with the emissions of the engine and the incorporation of other factors, would determine the amount a manufacturer must pay. Key parameters that determine the NCP a manufacturer must pay are EPA's estimated average cost of compliance, 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. The upper limit in both the Interim Final and Notice of Proposed Rulemaking is 0.50 g/hp-hr. The figure below provides the calculated penalties for emission rates between 0.20 and 0.50 g/hp-hr NOx for 2012 model year heavy heavy-duty engines under the interim final rule and proposed in the NPRM.



In addition, the figure below provides proposed level of the penalties at NOx emission rates between 0.20 and 0.50 g/hp-hr for 2012 model year medium heavy-duty engines under the proposed rule.



Why is EPA adopting an interim final rule and proposing a rule in parallel?

EPA is taking action as an interim final rule without prior proposal and public comment because EPA finds for good cause to do so for heavy heavy-duty diesel engines under section 553(b)(B) of the Administrative Procedure Act (APA), 5 U.S.C. 551 et seq. This section allows EPA to issue a final rule without notice-and-comment where it would be impracticable, unnecessary or contrary to the public interest. EPA has determined that there is good cause for making today's rule final without prior proposal and opportunity for comment, but only for heavy heavy-duty diesel engines. In reaching this determination, EPA considered several factors: (1) Taking interim

final action avoids the possibility of an engine manufacturer being unable to certify a complete product line of engines for model year 2012 and/or 2013; (2) the Agency is only amending limited provisions in existing NCP regulations in 40 CFR part 86; (3) the rule's duration is limited; and (4) there is no risk to the public interest in allowing manufacturers to certify using NCPs before the point at which EPA could make them available through a full notice-and-comment rulemaking.

EPA is also publishing a Notice of Proposed Rulemaking (NPRM) addressing NCPs for heavy-duty engines. Among other things, the NPRM seeks comment on NCPs for model year 2012 and later heavy heavy-duty diesel engines, as well as medium heavy-duty diesel engines. The NCPs in the Final Rule that will follow this NPRM will likely supersede the NCPs being promulgated in the Interim Final Rule, especially for model year 2013 and later.

What are the Health and Environmental Benefits?

NCPs have a minimal environmental impact. They provide 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, therefore the emission impact cannot be quantified. We expect relatively few engine families to be certified under these provisions. Any impacts should be short-term in nature, because the structure of the penalties, by increasing over time, discourages 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 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 manufacturers with a third alternative, yet protecting the manufacturer that has chosen to incur the costs of complying with the standards.

For More Information

You can access the interim final and the proposed rules 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