

EPA Finalizes Emission Control Program for 2004 and Later Model Year Highway Heavy-Duty Engines and Vehicles -- On July 31, 2000, EPA issued a final rule reaffirming the 2004 diesel HDE standards adopted in 1997, establishing new emission limits for gasoline-powered heavy-duty vehicles, OBD requirements for light, heavy-duty engines, and new certification test procedures that will take effect in 2007. The tighter HDDE NO_x standard may result in the re-introduction of oxidation catalyst technology on some HDDE makes and models to off-set the higher PM emissions resulting from engine-based strategies designed to reduce NO_x emissions. The new standards for gasoline-powered HDEs will create new opportunities for the application of advanced emission control technologies, including three-way catalyst technologies, engine/fuel management technologies and sensor technology.

The major elements of the final rule include:

- Reaffirm the NMHC+NO_x standard of 2.4 g/bhp-hr to take effect in 2004. The standards will result in more than a 40 percent reduction in NO_x emissions, as well as reductions in HC emissions.
- Add to the existing HDE transient certification test, new steady-state test cycles and not to exceed (NTE) standards (1.25 times the standard) effective with the 2007 model year. EPA had originally proposed the new standards for the 2004 model year, but delayed the changes for three years.
- Require on-board diagnostic (OBD) systems for engines between 8500 lbs. and 14,000 lbs. GVWR to be phased in beginning in 2005.
- Establish more stringent standards for gasoline-powered HDEs used in a vehicle above 14,000 lbs. GVWR of 1.0 g/bhp-hr HC+NO_x. The current standards are 4.0 g/bhp-hr NO_x and 1.9 g/bhp-hr HC.
- Establish more stringent standards for vehicles weighing less than 14,000 lbs. GVWR beginning in 2005 with incentives and flexibility mechanisms to encourage the early introduction of vehicles meeting the new standards. The current standards are 4.0 g/bhp-hr NO_x and 1.1g/bhp-hr HC.

The new standards are shown in Table 1.

**Table 1.
Emission Standards for Heavy-Duty Vehicles Beginning in 2005**

| Gross Vehicle Weight Rating | HC Standard | NO_x Standard |
|------------------------------------|--------------------|--------------------------------|
| 8,500-10,000 lbs | 0.28 gpm | 0.9 gpm |
| 10,001-14,000 lbs | 0.33 gpm | 1.0 gpm |

EPA has estimated that the final rule will reduce NO_x by 2.4 million tons per year by 2030. The agency estimates that the cost in the long-term will be less than \$400 per vehicle for diesel HDEs and less than \$300 for gasoline HDEs.

For more information, visit EPA's website at <http://www.epa.gov/otaq/hd-hym.htm>.