

TABLE III.D-1.—NTE STANDARD IMPLEMENTATION SCHEDULE—Continued

Power category	NTE Implementation model year <sup>a</sup>
75–175 hp .....	2012
175–750 hp .....	2011
>750 hp .....	<sup>c</sup> 2011

**Notes:**

<sup>a</sup> The NTE applies for each power category once Tier 4 standards were implemented, such that all engines in a given power category are required to meet NTE standards.

<sup>b</sup> The NTE standard would apply in 2012 for any engines in the 50–75 hp range who choose not to comply with the proposed 2008 transitional PM standard.

<sup>c</sup> The NTE standard only applies to the 50 percent of the engines in the >750 hp category which are complying with the proposed Tier 4 standard. Beginning in 2014 the NTE standard would apply to all nonroad engines >750 hp when the remaining 50 percent of the engines must comply with the Tier 4 standard.

The NTE test procedure can be run in nonroad equipment during field operation or in an emissions testing laboratory using an appropriate dynamometer. The test itself does not involve a specific operating cycle of any specific length, rather it involves nonroad equipment operation of any type which could reasonably be expected to occur in normal nonroad equipment operation that could occur within the bounds of the NTE control area. The nonroad equipment (or engine) is operated under conditions that may reasonably be expected to be encountered in normal vehicle operation and use, including operation under steady-state or transient conditions and under varying ambient conditions. Emissions are averaged over a minimum time of thirty seconds and then compared to the applicable emission standard. The NTE standard applies over a wide range of ambient conditions, including up to an altitude of 5,500 feet above-sea level at ambient temperatures as high as 86 deg. F, and at sea-level up to ambient temperatures as high as 100 deg. F. The specific temperature and altitude conditions under which the NTE applies, as well as

the proposed methodology for correcting emissions results for temperature and/or humidity are specified in the proposed regulations.

In addition, as with the 2007 highway NTE standard, we are proposing a transition period during which a manufacturer could apply for an NTE deficiency for a nonroad diesel engine family. The NTE deficiency provisions would allow the Administrator to accept a nonroad diesel engine as compliant with the NTE standards even though some specific requirements are not fully met. We are proposing these NTE deficiency provisions because we believe that, despite the best efforts of manufacturers, for the first few model years it is possible some manufacturers may have technical problems that are limited in nature but can not be remedied in time to meet production schedules. We are not limiting the number of NTE deficiencies a manufacturer can apply for during the first 3 model years for which the NTE applies. For the fourth through the seventh model year after which the NTE standards are implemented, a manufacturer could apply for no more than three NTE deficiencies per engine family. No deficiency may be applied

for or granted after the seventh model year. The NTE deficiency provision will only be considered for failures to meet the NTE requirements. EPA will not consider an application for a deficiency for failure to meet the FTP or supplemental transient standards.

The NTE standards we are proposing are a function of FTP emission standards contained in this proposal and described in section III.B. As with the NTE standards we have established for the 2007 highway rule, we are proposing an NTE standard which is determined as a multiple of the engine families underlying FTP emission standard. In addition, as with the 2007 highway standard, the multiple is either 1.25 or 1.5, depending on the value of the FTP standard (or the engine families FEL). These multipliers are based on EPA's assessment of the technological feasibility of the NTE standard, and our assessment that as the underlying FTP standard becomes more stringent, the NTE multiplier should increase (from 1.25 to 1.5). The proposed standard or FEL thresholds for the 1.25x multiplier and the 1.5x multiplier are specified for each regulated emission in Table III.D-2.

TABLE III.D-2.—THRESHOLDS FOR APPLYING NTE STANDARD OF 1.25XFTP STANDARD VS. 1.5X FTP STANDARD

Emission	Apply 1.25xNTE when . . .	Apply 1.5xNTE when . . .
NO <sub>x</sub> .....	NO <sub>x</sub> std or FEL ≥1.5 g/bhp-hr .....	NO <sub>x</sub> std or FEL <1.5 g/bhp-hr
NMHC .....	NO <sub>x</sub> std or FEL ≥1.5 g/bhp-hr .....	NO <sub>x</sub> std or FEL <1.5 g/bhp-hr
NO <sub>x</sub> +NMHC .....	NMHC+NO <sub>x</sub> std or FEL ≥1.6 g/bhp-hr .....	NMHC+NO <sub>x</sub> std or FEL <1.6 g/bhp-hr
>PM .....	PM std or FEL ≥0.05 g/bhp-hr .....	PM std or FEL <0.05 g/bhp-hr
CO .....	All stds or FELs .....	No stds or FELs

For example, beginning in 2011, the proposed NTE standard for engines meeting a FTP PM standard of 0.01 g/bhp-hr and a FTP NO<sub>x</sub> standard of 0.30 g/bhp-hr would be 0.02 g/bhp-hr PM and 0.45 g/bhp-hr NO<sub>x</sub>.

In addition, the nonroad NTE proposal specifies a number of

additional engine operating conditions which are not subject to the NTE standard. Specifically: The NTE does not apply during engine start-up conditions; the NTE does not apply during very cold engine intake conditions defined in the proposed regulations for EGR equipped engines

during which the engine may require an engine protection strategy; and, finally, for engines equipped with an exhaust emission control device (such as a CDPF or a NO<sub>x</sub> adsorber), the NTE does not apply during warm-up conditions for the exhaust emission control device, specifically the NTE does not apply