

## Emissions standards (and useful life)

The following description taken from this site.

The Tier 2 emission standards are structured into 8 permanent and 3 temporary certification levels of different stringency, called “certification bins”, and an average fleet standard for NOx emissions. Vehicle manufacturers have a choice to certify particular vehicles to any of the available bins. When fully implemented in 2009, the average NOx emissions of the entire light-duty vehicle fleet sold by each manufacturer has to meet the average NOx standard of 0.07 g/mi. The temporary certification bins (bin 9, 10, and an MDPV bin 11) with more relaxed emission limits are available in the phase-in period and expire after the 2008 model year.

Tier 2 vehicles are those meeting the requirements of one of the available bins and that are used to meet the requirement that a percentage of the fleet have average NOx emissions of 0.07 g/mile. During the phase-in period, the rest of the fleet not used to comply with the 0.07 g/mile NOx average are referred to as interim non-Tier 2 vehicles. They must still meet the requirements of one of the available bins but have more relaxed fleet average requirements.

The emission standards for all pollutants (certification bins) when tested on the Federal Test Procedure (FTP) are shown in Table 2. Where intermediate useful life exhaust emission standards are applicable, such standards are applicable for five years or 50,000 miles, whichever occurs first. The vehicle “full useful life” period for LDVs and light LDTs has been extended to 120,000 miles or ten years whichever occurs first. For heavy LDTs and MDPVs, it is 11 years or 120,000 miles whichever occurs first. Manufacturers may elect to optionally certify to the Tier 2 exhaust emission standards for 150,000 miles to gain NOx credits or to opt out of intermediate life standards. In such cases, useful life is 15 years or 150,000 miles, whichever occurs first. For interim non-Tier 2 LDV/LLDTs, the useful life is 10 years or 100,000 miles, whichever occurs first.