

Amendments to the "Emission Standards of Air Pollutants for Transportation Vehicles" for Motorcycles

By the Environmental Protection Administration, Taiwan

Background

Air pollutants, such as CO and THC, produced by motorcycles constitute the significant part of the total air pollutants produced by motor vehicles each year. As of January 2003, there are over 17 million in-use motorcycles on the road, and we probably have the highest density (496 motorcycles per square kilometres) of motorcycles in the world. As a result, the Environmental Protection Administration (EPA) adopts various approaches to reduce air pollutants emitted by motorcycles to ensure the environmental quality, including application of stringent emission standards, establishment of I/M system, and promotion of low emission vehicles.

According to a "Taiwan Air Pollutants Inventory" research report issued in 2003, transportation vehicles are the major contributor of Carbon Monoxide (CO, about 80%), Hydrocarbon (THC, about 19%) and Nitrogen Oxides (NO_x, about 43%) to atmosphere pollutants. Motorcycles account for a high percentage of the total Carbon Monoxide (about 20%) as well as the total Hydrocarbon (about 48%) emitted by transportation vehicles. With the advance of technologies to reduce exhaust emissions from motor vehicles, it is believed that the exhaust emissions from motorcycles could be further reduced. As part of the on-going approaches and recognizing the development of more stringent regulations internationally, the EPA proposes to amend the emission regulations for motorcycles.

The New Emission Standards

From 1 July 2007, a draft regulation is proposed to impose new standards on CO, HC and NO_x, which is similar to the requirements of advanced global motorcycle emission regulation and new category definition of motorcycles. The proposed draft regulation will harmonize test procedures with proposed EU's UDC and EUDC test procedure for motorcycles.

New Exhaust Emissions Standards for Motorcycles

Category	Carbon Monoxide CO (g/km)	Hydrocarbons HC (g/km)	Nitrogen Oxides NO _x (g/km)	Durability (km)
Class I (<150cc)	2.0	0.8	0.15	15,000 (3 years)
Class II (≥ 150cc)	2.0	0.3	0.15	15,000 (3 years)

Timetable for New Emission Standards

Vehicle model of motorcycles domestically manufactured and imported after 1 July

2007 shall comply with the new standards.

Vehicle model of motorcycles domestically manufactured and imported, which have passed "Vehicle Type Approval Certification" before 1 July 2007 shall be allowed to be manufactured and sold till 31 December 2008.