## **GRPE INFORMAL DOCUMENT**

## CANADIAN ON-ROAD VEHICLE AND ENGINE EMISSION REGULATIONS

The Canadian Department of the Environment (Environment Canada) published proposed new *On-Road Vehicle and Engine Emission Regulations* on March 30<sup>th</sup>, 2002. The regulations are part of the *Federal Agenda on Cleaner Vehicles, Engines and Fuels* announced in 2001, a plan to implement a series of measures to further reduce emissions from a range of vehicles and engines. The March 30<sup>th</sup> publication can be downloaded from <a href="http://www.ec.gc.ca/CEPARegistry/regulations">http://www.ec.gc.ca/CEPARegistry/regulations</a> by selecting "proposed regulations".

A sixty-day formal comment period closed on May 30<sup>th</sup>. Final regulations are planned to be published before the end of 2002 and to be effective for 2004 and later model-year vehicles manufactured on or after September 1<sup>st</sup> 2003.

The Department of Transport (Transport Canada) has regulated motor vehicle emissions since 1971 under the *Motor Vehicle Safety Act*. The *Canadian Environmental Protection Act*, 1999 transferred the responsibility to the Department of the Environment. Authority to regulate vehicle and engine emission standards and fuel quality is now consolidated under a single federal Act, which also newly provides authority to regulate off-road engine emissions.

Environment Canada is developing regulations for small spark-ignition engines, off-road diesel engines, recreational marine engines, large spark-ignition engines and off-road recreational vehicles. Regulations for each of the five off-road groups will be proposed later in 2002 and during 2003.

Since 1988 Canadian on-road vehicle emission standards have been, through a combination of regulations and voluntary agreements, aligned with those of the U.S. EPA. The proposed new Regulations are aligned with the U.S. Tier 2 emission standards for light vehicles and Phase 1 and Phase 2 emission standards for heavy-duty engines. Since these emission standards are the first under the new Act the proposed regulations also establish a new framework for their administration.

Complementary to the regulations for on-road vehicles and engines, Environment Canada has adopted the Sulphur in Gasoline Regulations (June, 1999) and proposed the Sulphur in Diesel Fuel Regulations (December 2001). Sulphur in gasoline will be limited to average 30 parts per million (ppm) in 2005, with an interim limit of 150 parts per million 2002, and sulphur in on-road diesel fuel is proposed to be limited to 15 parts per million in 2006.

The proposed *On-Road Vehicle and Engine Emission Regulations* adopt by reference major parts of the U.S. rules. This avoids the need to reproduce lengthy and complex standards and helps to ensure that there is one common standard. U.S. EPA certification is accepted as evidence of conformity to the Canadian regulations. This enables manufacturers to certify once for both U.S. and Canadian markets. The vast majority of vehicles in Canada are certified for and sold in both markets.

The U.S. light vehicle and heavy-duty engine standards include provisions for averaging, banking and trading of emissions and, in some cases, for obtaining certification with the payment of a non-conformance penalty. The Canadian regulations adapt to those provisions for a market one tenth of the size of the similar but not identical U.S. market. The application of emissions averaging in neighbouring markets creates unique issues for each different class of vehicle or engine and must be carefully considered in developing each set of regulations.

Environment Canada looks forward to working with other countries towards developing appropriate international emission standards for both on-road and off-road vehicles and engines.

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