

ESTABLISHMENT OF MOTOR VEHICLE EMISSIONS (MVE) **INSPECTION SYSTEM**

Vehicular emissions are one of the major causes of the air pollution, particularly in the cities. Pakistan, the number of vehicles has jumped from 0.8 million to about 4.0 million (1997 estimates) within 20 years showing an overall increase of 388%. Air pollution causes about 2,500 premature deaths per year, about 6.4 million hospital admissions and sicknesses. The estimated economic cost ranges between 249 and 358 million dollars. Recent surveys carried out in the country using mobile units revealed presence of very high levels of suspended particulate matter (about 6 times higher than the World Health Organization's guidelines) (*The study was initiated by JICA in collaboration with Pak-EPA and Punjab EPD in March 2000*). The wind speed, which is essential for flushing of pollution, is also low in our cities. In the dry and low-wind days, natural dust and anthropogenic pollution, when generated in excess, takes longer time to disperse off.

The country's Mid-term Development Framework: 2005-2010 has been drafted in line with the to improve and reorganize how we produce economic activity so that higher levels of economic activity can go hand-in-hand with better environmental quality. The Plan has been developed with the long-term objective of attaining sustainable economic growth without environmental degradation.

There is two major sources of air pollution: industrial emissions; and vehicular emissions. The current project addresses the air pollution caused by the vehicular emissions. The proposed Project is one of the projects envisaged in the Mid-term Development Framework: 2005-2010 and seeks to improve the air quality (particularly in urban centres), through inspection of vehicular emissions. The proposed allocation for the Project: Rs. 513 Million. (Pak Rupees Three Hundred Million). Time required for completion of Project is three years.

The air pollution caused by the vehicular emissions has been addressed in the Pakistan Environmental Protection Act, 1997, under its section 15, and also in the

National Environmental Quality Standards (NEQS). However, the necessary regulations, procedures and institutional set up have not been put in place to implement the Act and NEQS. Currently, the commercial vehicles are required to be examined by the Motor Vehicle Examiners (MVE) on a regular basis. The Motor Vehicle Ordinance 1965 (MVO 1965) and the Motor Vehicle Rules 1969 (MVR 1969) define powers and responsibilities of MVEs. The establishment of MVE inspection system is one of the regulatory measures that can be taken to tackle the ambient air quality problems associated with the vehicular emissions. Through this system, it can be ensured that the vehicles plying the roads are properly tuned, and have the necessary, properly functioning pollution control components.

SPECIFIC OBJECTIVES

- i) A fleet characterization study will be carried out in the cities (Islamabad and one city each from four provinces, Azad Jammu and Kashmir and Northern Areas where the model MVE inspection centres will be established as part of this project
- ii) Development of Emission Standards.
- iii) Development/Selection of Test Procedures for the testing/measurements of various pollutants (eg, Carbon monoxide (CO), hydrocarbons (HC), Oxides of Nitrogen (NO_x), particulate matter (PM), etc.) will be developed.
- iv) Development and Enactment of Rules under the Section 15 of the Pakistan Environmental Protection Act, 1997.
- v) Development of Model MVE Inspection Centres.
- vi) A system will be established to test the MVE inspection centres.
- vii) The necessary institutional arrangements will be determined and put in place for the enforcement and compliance of the MVE inspection system.
- viii) Coordination with Automobile Manufacturers/Importers
- ix) A comprehensive program will be designed and implemented for the capacity building of various stakeholders, including the MVE Inspection Centre staff, police officers, EPA staff, and other relevant personnel. The capacity building program will include trainings, study visits, workshops and seminars.

- x) Awareness Raising Campaign.
- xi) Development of Recommendations for MVE Inspection System in other cities.
- xii) Development of an outline plan for the full-scale implementation of the MVE Inspection System in the country.

Normally, the inspections are made with particular emphasis on the following items:

- General condition of the vehicle
- Seating room within the scope of Section 182 in Chapter VI of the MVR, 1969
- Front suspension
- Brake system
- Engine compression and smoke.