

**MITIGATION OF URBAN AIR POLLUTION THROUGH
IMPLEMENTATION OF SUCCESSFUL VEHICULAR
EMISSION TESTING PROGRAMME: ISSUES AND
STRATEGIES**

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Abstract

Vehicular emission contributes significantly to the degradation of urban air quality. Rapid increase in the vehicle fleet in Sri Lanka is mainly due to importation of used vehicles and, as a result, older vehicles or vehicles with little or no functioning emission controls are the major source of emissions. Several strategies have emerged over the years to control the emission from in-use older vehicles, among which inspection & maintenance (I/M) is most effective. In particular, a simple but effective I/M program can significantly reduce emissions from uncontrolled vehicles. However, the inspection, enforcement and mechanisms for I/M program should be designed carefully, since weak administrative and regulatory arrangements can result in massive evasion of the program and corruption practices. In this regard, the vehicular emission testing (VET) programme in Sri Lanka has been developed as an essential component of urban air quality management.

This paper analyses the present status of the proposed VET programme in Sri Lanka in order to identify the key issues and to develop appropriate strategies. In VET programme in Sri Lanka, many activities have been initiated to establish and strengthen the essential elements through number of well-designed programmes. Yet, there are number of key elements which need more attention and upgrading / strengthening. In particular, the inadequate training, skill development & awareness activities and lack of appropriate institutional structures in all levels are key barriers for the successful implementation. Another

element that has not received significant attention is the adequacy of vehicle repair facilities and associated factors including access to quality spare parts. Development of well structured monitoring, auditing, supervision and quality control mechanism is also essential for the sustainability of the programme. The strategies presented in this paper are primarily developed to oversee the issues underlined above, covering training, awareness & skill development, institutional development & strengthening, enhancement of resources (both equipment and manpower), monitoring, quality control & standardization. Further, research & development needs are also highlighted, especially with reference to modern technologies, appropriate testing methods and testing equipment.