

### **Level of Exhaust Emission from Diesel Vehicles in Sri Lanka**

H.P.N.J. Gunasekara, A.S. Pannila and S.I. Perera

*CISIR, Colombo 7.*

With the increasing volume of traffic in Colombo and suburbs it was observed that pollution of air has been getting worse during the last few years as indicated by measurements taken by several institutions.

As the first step the Central Environmental Authority (CEA) has imported 65 smoke meters from Sweden on the recommendation of former Ministry of Environment Parliamentary Affairs to monitor the level of smoke emitted by diesel vehicles with a view to get the owners to reduce excessive emissions from their vehicles. Though excessive emissions could be visually it would not be possible to prosecute the owners in the basis of visual observation alone.

Prior to gazetting regulations specifying the minimum smoke level permissible, CISIR carried out a survey on the level of smoke emitted by diesel vehicles. The measurements were carried out in free acceleration mode on about 75 vehicles of different types (cars, lorries, buses, trucks etc.)

This survey revealed that about 50% of the vehicles checked has smoke levels measured in terms of opacity above 90%. However the maximum allowable limit of smoke varies from country to country some of these values are India-75%. Thailand-52%, Malayasia-50% and Sweden 45%. None of these values can be directly implemented without any idea of emission levels of diesel vehicles in Sri Lanka. In this paper we present the levels of smoke emitted from different types of vehicles and the suitable recommendation to implement this in Sri Lanka.