THE DEVELOPMENT OF AN AIR EMISSION INVENTORY AND ITS BENEFITS

S.R. Jaysinghe¹ and A.A.P. de Alwis²

¹ Air Quality Division, National Building Research Organisation (NBRO). ² Department of Chemistry and Process Engineering, University of Moratuwa.

An air emission inventory is an essential planning tool in environmental management of the air shed. Today the state of the city's and suburbs air shed is fast becoming unsatisfactory and a recent fundamental rights case initiated by a Non-governmental organisation to draw the attention to this fact succeeded and has forced the authorities to accelerate implementing guidelines and practical steps in a short time span. When reviewing standards it is seen that we established certain standards in cases even below the suggested WHO guidelines and implemented precious little in a technical way thus leading to the gradual deterioration of the air shed over a period of time.

In all these evaluations an air emission inventory is quite useful as a development planning tool. At present Sri Lanka does not have such an inventory for any region or locality and the steps taken to develop an inventory for the Sapugaskanda area an area of high industrialisation is discussed in this paper. Both stationary and mobile sources are considered. Some air pollution assessment modelling was done to develop data and these have also been validated from the monitoring data available.

The need for an Air Quality Index (AQI) is also stressed as this is also a missing element in the present management system. A suggested scheme is given and some data is analysed for the indication of air shed quality.