

**THE NEED FOR CLIMATOLOGICAL STATISTICS OF URBAN AIR POLLUTION
AND A NUMERICAL MATRIX TO SUPPORT LEGISLATION.**

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Since the application of pollution-reducing legislation such pollution as now remains shows great variations in the concentration of the pollution in the air. Indeed, most of the time pollution is not a serious problem, and the old method of allowing the natural level of turbulence to dilute the emissions means that the problems are episodic, and each episode may be serious for only a few hours.

The causes of the episodes are largely well-known, and their effect cannot be reduced by building very tall chimneys nor by employing methods of eliminating the emission of particular chemical components, except in theory.

Clearly I have the exhaust emissions of road traffic in mind because they constitute the main sources which cannot readily be reduced. The problems of today arise largely because of the increase of road traffic, and when the traffic is reduced the problems do not arise.

At a conference held in London, in the Commonwealth Institute on 23 and 24 February 2000, on "Health Effects of Vehicle Emissions", the speakers from more than one manufacturer of vehicles pointed out that the exhaust from most vehicles has become much cleaner since the passing of the 1956 Clean Air Act, and that more recently talk has been in terms of "defending Air Quality Standards". The essential problem of today is that there is NO PROSPECT of absolutely clean air at any time. We can only approach that condition asymptotically, from the state that can be reached in a very few years from now. Further reductions will be possible only by reducing vehicle numbers or by finding a substitute for combustion engines.

This means that before long we will have to apply emission controls in a manner which depends on application when the weather which has become known to produce unacceptable concentrations of pollution is about to occur. This is sometimes referred to as "meteorological control" of emissions. If the emissions are engaged in an activity as a source of wealth then the control is likely to be a cause of objections, and, some sort of publicised rehearsal will be necessary. A system for reducing the strength of traffic flow rather quickly will have to be tried until it is well understood by all who are expected to be involved.