

DEVELOPMENT OF POLLUTION INDEXES FOR MEASURING AIR QUALITY IN URBAN AREAS**F. Murena***Dipartimento Di Ingegneria Chimica, Università Di Napoli 'Federico II', Naples, Italy*

Two different pollution indexes have been developed and implemented at the urban area of Naples (Italy). Data collected during 2003 from nine monitoring stations are analysed. One index aims to measure the status of air pollution with respect to its effect on human health. Breakpoint concentrations have been defined assuming limit values established by European Community and international associations like World Health Organisation. A procedure to evaluate the pollution index at each monitoring site and on the overall urban area is reported. Additive effects of air pollutants have also been considered and pollution index re-evaluated. The second index aims to give indication about the overcome of limit value established by EC directives. This index has been evaluated both in the case of a single pollutant on a single station than in the case of all pollutants on all stations. The index is also able to forecast the overcome of the maximum number of exceeds of the limit value as established by EC. The need of public administrators at the same time of easy and powerful tools for managing information about air quality and for communication to population requires the development of pollution or air quality indexes. Those proposed seem to be apt to this objective.