

IN THE FRAMEWORK DIRECTIVE 96/62/EC, THE PRELIMINARY ASSESSMENT AS A TOOL FOR AIR QUALITY MONITORING NETWORK DESIGN IN A CHINESE CITY

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In the framework of the Sino-Italian Program held by the Italian Ministry of Environmental and Territory, an Air Quality Monitoring System in the City of Suzhou (China) has been implemented from the Institute for Atmospheric Pollution of the Italian National Research Council (CNR-IIA). With respect to the Directive 96/62/EC, the preliminary assessment is a very important step for the identification of the sites for the fixed monitoring stations. To preliminarily assess air quality, 100 saturation stations, equipped with passive samplers for sulphur dioxide, nitrogen oxides, ozone, ammonia and BTX (benzene, toluene and xylene), have been used. The concentration values of these pollutants, coming from three campaigns carried out in Suzhou, have been represented and explored by using the Arcview 8.2 software with Geostatistical Analyst and Spatial Analyst statistical extensions. The interpolation has been carried out by using the two most important interpolation models (Inverse Distance Weighting and Ordinary Kriging) in order to evaluate which one better represents the phenomenon. With reference to each campaign, pollution maps related to each interpolation model and to each pollutant have been produced. Finally, it has been produced a map with the definitive siting of the fixed monitoring stations.