ARPEGE: Simulation of an Air Pollution Crisis

M.A. Greene, A. Hochhauser, M.J. Reilly,

J. F. Sautin, A.S. Walters

ENVIRONMENTAL STUDIES INSTITUTE

Carnegie-Mellon University

Pittsburgh, Pa.

Air pollution episodes represent a major environmental problem in urban areas. The high concentration of pollution sources in such areas results in dangerously high levels of air pollution during periods of poor weather conditions. The avoidance of hazardous levels depends upon rapid and decisive actions by responsible people together with cooperation of an informed public. There is a need for educational materials which treat effectively the problem of air pollution episodes.

The Air Pollution Episode Game is an educational tool which treats the relevant aspects of urban life during a period of high air pollution. The participants assume various realistic roles and receive information and make decisions characteristic of those roles. The heart of the game is a computer simulation program which calculates meterology, emissions, air quality, adverse effects, etc.