



Environmental Fluid Dynamics Program

Department of Mechanical and Aerospace Engineering

AND



DECISION THEATER
ARIZONA STATE UNIVERSITY

Joint DT/EFD Seminar

SMOG ALERT: THE CHALLENGES OF BATTLING OZONE POLLUTION

by

Mark Bernstein, Ph.D.
The RAND Corporation

AT 5 A.M. ON 6 NOVEMBER 1958, Nathan Louis Gordon died of a heart attack at his home in Los Angeles. The death of the 73-year old former sales clerk would never have made the news—except that Gordon’s physician, Dr. Peter Veger, was convinced there was more to his patient’s sudden death than just a bum heart. Five years earlier, Gordon had developed atherosclerotic heart disease after living in Los Angeles for three decades. Dr. Veger believed that air pollution had inflamed Gordon’s heart condition and contributed to his fatal heart attack. In what may be a first in the history of American epidemiology, Veger cited “Los Angeles Smog” as a contributing cause of death on Gordon’s death certificate. In the decades that followed Dr. Veger’s controversial postmortem diagnosis, the evidence has grown that summer spells of elevated ozone pollution do in fact contribute to the premature death of several thousand Americans each year. At the same time, the threat of ground level ozone pollution had increased the public awareness of pollution problems. Ozone pollution is so ubiquitous that the terms “ozone” and “smog” are now often used interchangeably—although smog technically is more chemically complex than ground-level ozone alone. This talk will look at the current state of ground-level ozone in the US and factors that make controlling ozone so difficult. We will look at the paradox that controlling ozone presents to national level policy and planning, and look at ongoing issues in reducing ozone problems; from the lack of data, to the state of scientific understanding, to new information about international transport of precursors to ozone.

Tuesday, October 11, 2005
GWC 487
3:30 pm