Hazy reasoning behind clean air
Science alone can’t determine how regulations are written, argues David Goldston.

EPA’s science panel found that “quantitative evidence […] must … be characterized as having high uncertainties.” What to do in the face of uncertainty is a policy question, not a scientific question. […] The debate is about […] what kinds of uncertainty can be tolerated as a basis for decision-making.
Industry groups are fighting government regulation by fomenting scientific uncertainty

Doubt

Is Their Product

By David Michaels
Photographs by Mindy Jones

Science American, June 2005, pp. 96
Origins of Science and Trans-Science

Alvin M. Weinberg
Medical Sciences Division
Oak Ridge Associated Universities
Oak Ridge, TN 37831-0117

At the time Oak Ridge National Laboratory was becoming involved in the debate over nuclear power—in particular the debate over the hazard of low levels of radiation.

After the paper was published, Harvey Brooks added another dimension to “trans-science”—the evolution in time of systems governed by large classes of nonlinear equations.

Harvey Brooks suggested that an analysis of such situations was beyond the power of mathematics, and therefore, was trans-scientific.² The term “trans-science” is used quite widely now. Perhaps most notable was W. Ruckelhaus’s admission in 1985 that many of the EPA’s regulations hang on the answers to questions that can be asked of science but cannot be answered by science—i.e., are trans-scientific.³