

CHEMICAL HERITAGE FOUNDATION

WARREN R. MUIR

**THE TOXIC SUBSTANCES CONTROL ACT:
FROM THE PERSPECTIVE OF
WARREN R. MUIR**

Transcript of Interviews
Conducted by

Jody A. Roberts and Kavita Hardy

at

National Academy of Sciences
Washington, D.C.

on

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(With Subsequent Corrections and Additions)

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WARREN R. MUIR

Education

1967 BA, Chemistry, Amherst College
1968 MS, Chemistry, Northwestern University
1971 PhD, Chemistry, Northwestern University

Professional Experience

Council on Environmental Quality, Executive Office of the President,
Washington, DC
1971-1973 Staff Member
1974-1978 Senior Staff Member for Environmental Health

US Environmental Protection Agency, Washington, DC
1978-1980 Deputy Assistant Administrator for Testing and Evaluation
1980-1981 Director, Office of Toxic Substances

Johns Hopkins University, Baltimore, Maryland
1981-1983 Visiting Associate Professor, Department of Environmental
Health Sciences
1983-1999 Adjunct Professor, Department of Environmental Health Sciences

American University, Washington, DC
1982-1984 Adjunct Professor, Department of Biology

IDEA*TECH Associates, Inc., Alexandria, Virginia
1982-1985 Co-founder and Chairman of the Board

Hampshire Research Associates, Inc., Alexandria, Virginia
1981-1999 Founder and President

The Hampshire Research Institute, Alexandria, Virginia
1987-1999 Founder and President

National Academy of Sciences, Washington, DC
1999-2001 Executive Director, Commission on Life Sciences
1999-2001 Executive Director, Board on Agriculture and Natural Resources
2001-present Executive Director, Division on Earth and Life Studies

Honors

- 1967 Howard Waters Doughty Prize
- 1967 American Chemical Society Connecticut Valley Student Award
- 1967 Forris Jewett Moore Award
- 1980 US Environmental Protection Agency Outstanding Service Award
- 1992 US Environmental Protection Agency Administrator's Award for Pollution Prevention
- 1992 Awarded Officer Brother (O.St.J.), in The Most Venerable Order of St. John of Jerusalem, by H.R.H. Queen Elizabeth II
- 1996 Awarded Commander (C.St.J.), in The Most Venerable Order of St. John of Jerusalem, by H.R.H. Queen Elizabeth II
- 2003 National Academies Community Service Award

ABSTRACT

Warren Muir received a bachelor's degree in chemistry from Amherst College. He then moved to Northwestern University's PhD program and was captured by the new societal awareness of environmental issues. He joined Students for a Better Environment and with a colleague published the first list of phosphates in detergents. During this time Earth Day originated, and demands for governmental protection took off. Muir was recruited into the Council on Environmental Quality, whose initiatives included the Clean Water, Clean Air, and Safe Drinking Water Acts; these acts would control chemicals through production, distribution, and use instead of the cleanup-contaminate approach used for drugs, food, pesticides, etc. He says the group was small but powerful.

The first hurdle was the lack of knowledge of the universe of chemicals: Who made them, how many were there, how much was there, what were their effects? Should there be a registry, and if so how would it work? The next hurdle was the disagreement between the houses of the US Congress, abetted by lobbying from manufacturers. Finally J. Clarence Davies' report for CEQ was drafted into legislation and passed as the Toxic Substances Control Act (TSCA). At that point it was handed over to the new Environmental Protection Agency (EPA) for implementation. The EPA was slow to figure out how to use TSCA. They first developed a chemical inventory and then rules for production and use of new chemicals. Muir discusses several of TSCA's rules and their successes and failures.

Muir founded Hampshire Research Associates, which worked in a number of different areas, mostly pollution prevention. Through INFORM, Inc. Muir and David Sarokin made suggestions that led to the formation of the Toxic Release Inventory (TRI); TRI's chemical analysis of waste led to the Pollution Prevention Act. Hampshire developed the database and wrote the reports for the EPA. Muir moved on to a pollutant release and transfer register for Organisation for Economic Co-operation and Development (OECD). He says that voluntary actions by manufacturers have also decreased pollution.

Muir says that a only small fraction of uses of a wide range of chemicals causes problems; and that uses are dynamic. He believes, therefore, that a centralized denoting of some chemicals as priority chemicals is not useful. He has five points for improvement: choosing a use-based approach; gathering and tracking information; narrowing the definition of "confidential" in confidential business information (CBI), which he says severely limits sharing of information; making producers responsible; and retaining and improving the new-chemical review. Information is crucial and its availability is increasing exponentially with new technology. Muir maintains that an independent review of the EPA and of the various efforts of the states would be illuminating. Both regulators and manufacturers should have kind of a "general duty clause."

INTERVIEWERS

Jody A. Roberts is the Director of the Institute for Research at the Chemical Heritage Foundation. He received his PhD and MS in Science and Technology Studies from Virginia Tech and holds a BS in Chemistry from Saint Vincent College. His research focuses on the intersections of regulation, innovation, environmental issues, and emerging technologies within the chemical sciences.

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