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

22 January 2010

(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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