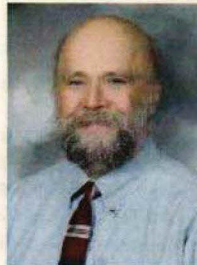


DEPARTMENT OF SOCIAL SCIENCES

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Fredric L. Quivik



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Professor of History

Editor, IA: Journal of the Society for Industrial Archeology

PhD, History and Sociology of Science, University of Pennsylvania, 1998

MS, Historic Preservation, Columbia University, 1977

BED, University of Minnesota, 1975

BA, Art, St. Olaf College, 1971

Biography

I joined the Department of Social Sciences at Michigan Tech after three decades working in the private sector as a contractor and consultant in historic preservation and history of technology. I am particularly interested in the intersections of technology and the environment, and I have had the good fortune to be able to explore those intersections in my consulting work, writing, and teaching.

For more than fifteen years prior to coming to Michigan Tech, my main source of income was as an expert witness in Superfund and related environmental litigation, usually working for the U.S. Department of Justice. Many Superfund and other environmental cases involve damage to the environment that occurred decades ago. The litigation has two purposes: 1) to determine the facts of how the damage occurred, and 2) to determine how the law applies to the facts. Because there are often few, if any, living witnesses to the causes of environmental harm in past decades, the courts and both sides in the litigation typically rely on expert historians to research and draw conclusions (called expert opinions in legal parlance) about past events. I have worked on several large cases, including U.S. v. Arco, et al, the Clark Fork Superfund case in Montana involving the consequences of industrialized copper mining and smelting that led to largest Superfund site in the nation, and U.S. v. Sunoco, et al, a case in Philadelphia involving groundwater contamination by millions of gallons of refined petroleum product.

For an even longer period I have worked in the field of historic preservation, beginning in Butte, Montana, where I founded an historic preservation firm. After having conducted a statewide inventory of historic bridges in Montana for the Historic American Engineering Record (HAER) from 1979 to 1981, I focused my work on historic sites that have an engineering or industrial character. I completed HAER documentation of bridges, large dams, and other industrial sites in Montana and elsewhere in the West. Since the 1980s, either working or contracting for HAER, I documented cultural resources in the Connellsville Coal & Coke Region of southwest Pennsylvania, a stamp mill used in the gold-mining industry in California, a Ford Motor Company assembly plant in Richmond, CA (a.k.a. the Richmond Tank Depot during World War II), and a Kaiser shipyard in Richmond.

Throughout those years, I taught as an adjunct lecturer at Montana State University in Bozeman, Montana Tech in Butte, the University of California at Berkeley, and the University of Pennsylvania in Philadelphia. Now teaching in the Department of Social Sciences, I bring together those several streams of work to help students learn from and manage cultural landscapes, particularly landscapes shaped by industrial activities. I teach undergraduate courses in history of technology, environmental history, history of American architecture, and energy in American history. I am part of the Department of Social Sciences' graduate program in Industrial Archaeology and Industrial Heritage, and I am affiliated with our graduate program in Environmental & Energy Policy.

My current research and writing projects involve revising some of my reports completed over the past several years. The audience for an expert report is the judge, and perhaps the attorneys working for the other side. My challenge now is to reframe and revise some of those reports so that they will be suitable for publication to a wider audience. My main current project is the revision of the report I wrote in U.S. v. Asarco, et al, the Bunker Hill Superfund case in Idaho. In that history, social conflict arose as farmers and the mining industry sought to shape the same environmental space to the purposes for which each of them thought it was best suited. Their efforts were incompatible, and the means they each used in trying to prevail over the adversary established patterns we still see in environmental conflicts today.

Prior to joining Michigan Tech's faculty in 2010, I had worked for more than two decades as a consultant, first in historic preservation, and then from 1994 onward, as an expert witness (expert

in industrial history) in Superfund and other environmental litigation, focusing on the history of the mining and mineral-processing industries. I am a long-time member of the Society for Industrial Archeology, and in the 1980s I was one of the founders of the Society's Montana chapter.

Links of Interest

- Society for Industrial Archeology
- HABS/HAER Collection, Library of Congress
- American Society for Environmental History

Areas of Expertise

- History of Technology
- Environmental History
- Architectural History
- Industrial Archeology
- History of the Organization of Industrial Enterprises

Recent Publications

- Fredric L. Quivik, "Cooling Mass Concrete: Owyhee, Hoover, and Building Large Dams," *Engineering History & Heritage*, 166, EH4.
- Fredric L. Quivik. 2011. "Overcoming Barriers: Milk River Irrigation Project, Montana," *Engineering History and Heritage* 164.EH4: 245-254.
- Fredric L. Quivik. 2009. "Engineering Nature: the Souris River and the Production of Migratory Waterfowl," *History and Technology* 25.4: 307-323.
- Fredric L. Quivik. 2007. "The Industrial Undergirding to the Vernacular Architecture of Butte and Anaconda," *Coming Home*, Patty Dean, ed., (Helena, MT: Drumlummon Institute, 2009)
- Fredric L. Quivik. 2007. "The Historical Significance of Tailings and Slag: Industrial Waste as Cultural Resource," *IA: The Journal of the Society for Industrial Archeology* 33.2: 35-54.

Presentations

Research Projects

Teaching Experience