

KENNETH R. RYGWELSKI

Environmental Engineer

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Education:

B.S., Chemistry, Michigan Technological University, 1972

M.S., Chemical Engineering, Wayne State University, 1983

Graduate Certificate, Hazardous Waste Control, Wayne State University, 1995

Employment:

1995-Present	Environmental Engineer, U.S. EPA, Grosse Ile, MI
1995-1995	Data Coordinator/Modeler, Alpha Omega Chemical Corporation
1993-1994	Coordinator/Modeler, ASCI Corporation Data
1984-1993	Section Manager, Computer Sciences Corporation
1973-1984	Technical Supervisor, Cranbrook Institute of Science

Research Interests and Skills:

My current research interests include mathematical modeling of atrazine and mercury in the Lake Michigan basin to predict environmental exposure concentrations for the purposes of predicting effects of the two chemicals on biota in the lake. I am also interested in using models to predict hypoxia in both marine and freshwater systems.

Professional Societies:

International Association of Great Lakes Research

Friends of the Detroit River

Selected Appointments/Honors/Major Awards:

Received NHEERL Goal 1 Award for support of the U.S. EPA Region 5 Great Lakes National Program Office by presenting results of the LMMBP. 10/2006

Received EMS Coordinator Certificate of Accomplishment for EMS Implementation at LLRS by Assistant Administrator, Luis Luna. Fulfills requirements under Executive Order 13148. 10/2006

Received cash NHEERL S-award for LLMBP presentation to the states. 10/2006

Superior Accomplishment Recognition Awards: 1999, 2001, 2002, 2003, 2004, 2005

Received agency bronze medal for Exceptional/Superior Service - Lake Michigan Mass Balance Group for the Development, Planning, and Implementation of the Lake Michigan Mass Balance Study. 02/2004

U.S. EPA /OARM Bronze Medal for Commendable Service - SHEM Program, 2000

Member of the Environmental Advisory Board (City of Trenton, MI), 2000–2004

Certified Hazardous Materials Manager (CHMM) by Institute of Hazardous Materials Management, 1995–Present

Selected Publications:

Melendez, W., M. Settles, J. J. Pauer, and K. R. Rygwelski. 2009. LM3: A High-Resolution Lake Michigan Mass Balance Water Quality Model. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Mid-Continent Ecology Division, Large Lakes Research Station, Grosse Ile, Michigan. EPA/600/R-09/020, 329 pp.

Zhang, X., K.R. Rygwelski, and R. Rossmann. 2009. The Lake Michigan contaminant transport and fate model, LM2-toxic: development, overview, and application. *J. Great Lakes Res.* 35:128-136.

Rygwelski, K. R. (ed.). 2008. Results of the Lake Michigan Mass Balance Project: Atrazine modeling report, EPA/600/R-08/111, 140 pp.

Zhang, X., K. R. Rygwelski, R. Rossmann, J.J. Pauer, and R.G. Kreis, Jr. 2008. Model construct and calibration of an integrated water quality model (LM2-Toxic) for the Lake Michigan Mass Balance Project. *Ecol. Modell.* 219:92-106.

Zhang, X. and K.R. Rygwelski. 2000. A modeling framework for mercury cycling in Lake Michigan. In *11th Annual International Conference on Heavy Metals in the Environment*, J. Nriagu, Ed., Contribution # 1127, University of Michigan, School of Public Health, Ann Arbor, MI (CD-ROM).

Rygwelski, K.R., W.L. Richardson, and D.D. Endicott. 1999. A screening-level model evaluation of atrazine in the Lake Michigan Basin. *J. Great Lakes Res.* 25:94-106.