

**Donna M. Kenski**  
Lake Michigan Air Directors Consortium  
9501 W. Devon Ave., Rosemont, IL 60018  
(847)720-7883 kenski@ladco.org

### **Education**

Ph.D, Public Health, 1997, University of Illinois at Chicago  
M.S., Public Health, 1992, University of Illinois at Chicago  
B.A., Biology, 1977, Blackburn College, Carlinville, IL

### **Professional Experience**

Data Analysis Director, 2000-present, Lake Michigan Air Directors Consortium, Des Plaines, IL

Manage multiple data analysis and air pollution monitoring contracts. Apply exploratory and graphical data analysis methods to derive relationships between air quality, meteorology, and emissions. Determine the sources of pollutants and meteorological conditions associated with good and poor air quality. Develop and apply statistical models (CMB, CART, multivariate regression, parametric and nonparametric models). Plan and implement field studies and special monitoring projects. Review and optimize existing monitoring networks. Manage interstate data analysis workgroup.

Environmental Scientist, 1996-2000, U. S. Environmental Protection Agency, Chicago, IL

Oversaw the collection of air quality data from the Photochemical Assessment and Monitoring Stations, performed statistical analyses of data from national and state air quality monitoring networks, and examined emission inventories for consistency with ambient data. Worked closely with state, regional, and national monitoring community to coordinate data analyses and disseminate results. Planned and managed short-term air sampling projects for research and investigations.

Research Specialist, 1989-1996, UIC SPH-EOHS, Chicago, IL

Research focus encompassed (1) receptor modeling of VOCs to determine the relative contributions of industrial sources to ambient air pollution and (2) application of these results to urban ozone modeling to develop ozone control curves. Analyzed data from the Lake Michigan Ozone Study and the Southeast Michigan Ozone Study.

Policy Analyst, Technical Editor, 1980-1989, Argonne National Laboratory, Argonne, IL

### **Professional Affiliations**

Academic Appointment: Adjunct Assistant Professor, Environmental and Occupational Health Sciences, University of Illinois at Chicago.

Journal Reviewer: ES&T, JAWMA, J. Env. Eng., Atmos.Env.

### **Advisory Panels**

Clean Air Scientific Advisory Committee, Statutory Committee, 2007-2009. The statutory committee of CASAC provides independent reviews to EPA of all national ambient air quality standards.

Clean Air Scientific Advisory Committee, Ambient Air Monitoring and Methods Subcommittee, 2004-2005 (National Advisory Committee to EPA):

- Consultation on methods for measuring coarse-fraction particulate matter in ambient air, based on performance evaluation field studies conducted by EPA;
- Advisory meeting on the National Ambient Air Monitoring Strategy Implementation

EPA Region 5 Advisory Workgroup to the Baltic States, 1997-1998.

## Journal Articles

Risch, M.R., Kenski, D.M., Gay, D.A., A Great Lakes Atmospheric Monitoring Network: Evaluation and Design, *Atmospheric Environment* 85:109-122 (March 2014).

Stanier, C.O., Singh, A., Adamski, W., Baek, J., Caughey, M., Carmichael, G.R., Edgerton, E., Kenski, D., Koerber, M., Oleson, J., Rohlf, T., Lee, S.R., Riemer, N., Shaw, S., Sousan, S., Spak, S. Spak, S., Baek, J., Carlson, J., Carmichael, G., Kim, Y.J., Riemer, N., Stanier, C.O., Overview of the LADCO Winter Nitrate Study: Hourly Ammonia, Nitric Acid and PM<sub>2.5</sub> Composition at an Urban and Rural Site Pair During PM<sub>2.5</sub> Episodes in the U.S. Great Lakes Region. *Atmospheric Chemistry and Physics*. Vol. 12, pp. 1-12. doi:10.5194/acp-12-1-2012.

Sullivan, A.P., N. Frank, D.M. Kenski, J.L. Collett, Application of High-Performance Anion-Exchange Chromatography – Pulsed Amperometric Detection for Measuring Carbohydrates in Routine Daily Filter Samples Collected by a National Network: 2. Examination of Sugar Alcohols/Polyols, Sugars, and Anhydrosugars in the Upper Midwest, *J. Geophys. Res.* 116, D08303, doi:10.1029/2010JD014169 (Feb 2011).

Dong, M. D. Yang, Y. Kuang, D.He, S. Erdal, and D. Kenski, PM<sub>2.5</sub> Concentration Prediction Using Hidden Semi-Markov Model-Based Times Series Data Mining, *Expert Systems with Applications*, 36(5): 9046-9055 (July 2009).

Koerber, M., D. Kenski, and K. Baker, Regional Air Quality Planning for Ozone in the Midwest, *Environmental Manager* (January 2008).

Hall, B.D., H. Manolopoulos, J.P. Hurley, J. J. Schauer, V.L. St. Louis, D. Kenski, J. Graydon, C.L. Babiarz, L.B. Cleckner, and G.J. Keeler, Methyl and total mercury in precipitation in the Great Lakes region, *Atmos. Env.* 39:7557-7569 (Nov. 2005)

Kenski, D.M., M. Koerber, H.R. Hafner, M.C.McCarthy, N.J.M. Wheeler, Lessons Learned from Air Toxics Data: A National Perspective, *Environmental Manager* (June 2005).

Kim, E., P.K. Hopke, D.M. Kenski, and M. Koerber, Sources of Fine Particles in a Rural Midwestern U.S. Area, *Environ. Sci. Technol.*, 39 (13), pp 4953–4960 (2005)

Koerber, M., and D.M. Kenski, Case for Using Weight-of-Evidence Demonstrations in State Implementation Planning, *Environmental Manager* (April 2005).

Sheesley, R.J., J.J. Schauer, E. Bean, and D. Kenski, Trends in Secondary Organic Aerosol at a Remote Site in Michigan's Upper Peninsula, *Env. Sci. and Tech.* 38(24); 6491-6500 (Oct 2004).

Foley, T.A., C.S. Rendahl, and D.M. Kenski, Effect of Reformulated Gasoline on Ambient Carbon Monoxide Concentrations, *J. Air and Waste Management Association* 53:1005 (Aug. 2003).

Scheff, P.A., R.A. Wadden, D.M. Kenski, J.Chung, and G.Wolff, Receptor Model Evaluation of Southeast Michigan Ozone Study Ambient VOC Measurements, *J. Air and Waste Management Assoc.* 46:1048-1057 (Nov. 1996).

Kenski, D.M., R.A. Wadden, P.A. Scheff, and W.A. Lonneman, Receptor Modeling Approach to VOC Emission Inventory Validation, *J. Environ. Eng.* (July 1995).

## Other Publications and Proceedings

Kenski, D., Inter- and Intra-city Spatial Variability in PM<sub>2.5</sub> Component Species: Influences of Local and Regional Sources, *Proc. AWMA Symposium on Air Quality Measurement Methods and Technology*, Durham, NC (May 2006).

Kenski, D.M., and B. Sponseller, Anatomy of a Midwestern PM<sub>2.5</sub> Episode, *Proc. AWMA Symposium on Environmental Data Analysis – Assessing Health and Environmental Impacts*, Oak Brook, IL (Oct. 2005)

Kenski, D.M., and D.A. Gay, Issues in Ammonia and Nitric Acid Measurement: Experiences in the Midwest, Proc. AWMA Symposium on Measurement Methods and Technology, San Francisco (April 2005).

Sheesley, R.J., J.J. Schauer, D. Kenski, H.R. Hafner, Regional Trends in Fine Particle Elemental and Organic Carbon Concentrations in the Midwest, Proc. AAAR PM Supersites Conference, Atlanta, GA (Feb. 2005).

Lee, J.H., P.K. Hopke, D.M. Kenski, and M. Koerber, Source Apportionment Of Midwest Pm2.5 Using Advanced Receptor Model, Proc. AAAR PM Supersites Conference, Atlanta, GA (Feb. 2005).

Kenski, D.M., and D.A. Gay, Ammonia and Nitric Acid Measurements in the Midwest, poster presented at 2004 NADP Scientific Symposium, Halifax, N.S. (Sept. 2004)

Kenski, D.M., D.A. Gay, and S. Fitzsimmons, Ammonia and Its Role in Midwestern Haze, Proc. Regional and Global Perspectives on Haze, AWMA Specialty Conf., Asheville, NC (Oct. 2004).

Poirot, R.L., R.B. Husar, G. Kleiman, D. Kenski, Aerosol and Haze Observations during 2004 with the FASTNET Distributed Monitoring System, Proc. Regional and Global Perspectives on Haze, AWMA Specialty Conf., Asheville, NC (Oct. 2004).

Adlhoch, J., K. Sutton, D. Kenski, and M. Koerber, Analysis of Aerosol and Optical Data from Four LADCO Monitoring Sites, Proc. Regional and Global Perspectives on Haze, AWMA Specialty Conf., Asheville, NC (Oct. 2004).

Kenski, D.M., CART Analysis of Historic Ozone Episodes, Proc. AWMA 97th Annual Conf., Indianapolis (June 2004).

Kenski, D.M., Quantifying Transboundary Transport of PM2.5: A GIS Analysis, Proc. AWMA 97th Annual Conf., Indianapolis (June 2004).

Kenski, D.M., and M. Koerber, Ambient Ammonia Concentrations: A Data Review, Proc. NADP 2003 Ammonia Workshop, Washington, DC (Oct. 2003).

Kenski, D.M., M. Pushkarsky, M.E. Webber, and C. Kumar N. Patel, Field Study: Intercomparison of Two Continuous Ammonia Monitors, Proc. NADP 2003 Ammonia Workshop, Washington, DC (Oct. 2003).

Foley, T.A., C.S. Rendahl, and D.M. Kenski, Effect of Reformulated Gasoline on Ambient Carbon Monoxide Concentrations, J. Air and Waste Management Association 53:1005 (Aug. 2003).

Kenski, D.M., CMB Analysis of Urban PM2.5, Proc. AWMA Symposium on Air Quality Measurement Methods and Technology, San Francisco (Nov. 2002).

Kenski, D.M., and M. Koerber, Regional Haze in the Midwest; Composition, Seasonality, and Source Region Identification, Proc. Regional Haze and Global Radiation Balance, Bend, OR (Oct. 2001)

Kenski, D.M., and M. Janssen, Using PAMS Data to Compare and Evaluate Two Emission Inventory Tools: Receptor Models and EMS-95, presented at EPA PAMS Data Analysis Workshop, Research Triangle Park, NC (Sept 2000).

Kenski, D.M., Receptor Modeling for Ozone Prediction: An Evaluation of the Lake Michigan Ozone Study Data, Ph.D. Dissertation, University of Illinois at Chicago (May 1997).

Kenski, D.M., R.A. Wadden, and P.A. Scheff, Using Ambient Data to Examine Emission Inventories: A Mass Balance Approach, Proc. 89th Annual AWMA Meeting, Nashville, Tenn. (June 1996).

Scheff, P.A., R.A. Wadden, D. M. Kenski, and J. Chung, Receptor Model Evaluation of the Southeast Michigan Ozone Study Ambient NMOC Measurements, Proc. 88th Annual AWMA Meeting, San Antonio, Texas (June 1995).

Kenski, D.M., R.A. Wadden, and P.A. Scheff, Receptor Modeling Evaluation for Lake Michigan Ozone Study Measurements for VOC, Proc. 87th Annual AWMA Meeting, Cincinnati, Ohio (June 1994).

Kenski, D.M., R.A. Wadden, and P.A. Scheff, Receptor Model Evaluation for Lake Michigan Ozone Study Measurements for VOC, Proc. Regional Photochemical Measurement and Modeling Studies, Air and Waste Management Assoc. Specialty Conference, San Diego, California (November 7-12, 1993).

Kenski, D.M., R.A. Wadden, and P.A. Scheff, A Receptor Modeling Approach to VOC Emission Inventory Validation in Five U.S. Cities, Proc. 86th Annual AWMA Meeting, Denver (June 1993)

Kenski, D.M., R.A. Wadden, P.A. Scheff, and W.A. Lonnenman, Receptor Modeling of VOCs in Atlanta, Georgia, Proc. 85th Annual AWMA Meeting, Kansas City (June 1992).

Kenski, D.M., R.A. Wadden, P.A. Scheff, and W.A. Lonnenman, Receptor Modeling of VOCs in Chicago, Beaumont, and Detroit, Proc. 84th Annual AWMA Meeting, Vancouver (June 1991).

Wadden, R.A., P.A. Scheff, J. Lin, H.-S. Lee, C. Keil, J. Graf, K. Keehan, D. Kenski, S. Milz, T. Holsen, and N. Khalili, Two-Phase Receptor Modeling, Proc. 84th Annual AWMA Meeting, Vancouver, BC (June 1991).

Scheff, P.A., R.A. Wadden, Q. Zhou, D.M. Kenski, H.-S. Lee, and B. Bates, Evaluation of a Receptor Model for Volatile Organic Compounds Using Ground-Based Trajectories, Proc. 83rd Annual AWMA Meeting, Pittsburgh (June 1990).

#### **International Experience**

Estonia, Latvia, Lithuania (May 1997, August 1997): Advised Hydrometeorological Agencies of Baltic States on EPA air quality models and air monitoring networks; reviewed monitoring networks for technical capabilities and needs; developed EPA class on air quality models given in Latvia.

Cartagena, Spain (February 1998): Invited lecturer at Fourth International Course on Environmental Modeling, Universidad de Murcia.

Torre Guill, Spain (November 2001): Invited lecturer at Seventh International Course on Environmental Modeling, Universidad de Murcia.