

Drew Robert Van Orden

Affiliation: RJ Lee Group, Inc.
350 Hochberg Road
Monroeville, PA 15146

Education: M.A., Applied Statistics, University of Pittsburgh, 1998
M.S., Mineral Process Engineering, Pennsylvania State University, 1979
B.A., Meteorology and Oceanography, Millersville State College, 1975

Career/Employment: RJ Lee Group, Inc., 1986 - present
Manager, Quality Assurance
BJL Laboratoires, 1996 - 1997
Directeur Technique
Consulting Engineer, 1985 - 1986
US Steel Technical Center, 1979 - 1985
Research Project Engineer

Summary:

- ♦ Directed large study on the effect of large scale vibrations (earthquakes) on ambient asbestos concentrations
- ♦ Provided data analyses and document review to the HEI-AR
- ♦ Wrote and managed quality control programs for the company
- ♦ Statistical analysis of complex data sets
- ♦ Responsible for the registration and certification of the RJ Lee Group in national and state certification programs
- ♦ Lead author of the ASTM D-5756 asbestos-in-dust mass method
- ♦ Extensive experience in mineral process engineering, including process optimizations and plant automation

Honors, Awards, Fellowships & Memberships

- ♦ Registered Professional Engineer, Mineral Engineering, Commonwealth of Pennsylvania
- ♦ Society of Mineral Engineers, SME/AIME
- ♦ American Society for Testing and Materials, ASTM
- ♦ American Society of Quality, ASQ
- ♦ American Statistical Association, ASA
- ♦ American Industrial Hygiene Association, AIHA
- ♦ National Society of Professional Engineers, NSPE



Papers and Publications
Drew Robert Van Orden

Richard J. Lee, Drew R. Van Orden, Ian M. Stewart, "Dust and Airborne Concentrations - Is there a Correlation?", *Advances in Environmental Measurement Methods for Asbestos*, ASTM S1P 1342, M.E. Beard, H.L. Rook, Eds., American Society for Testing Materials (1998).

Lee, R.J., D.R. Van Orden, G.R. Dunmyre, "Interlaboratory Evaluation of the Breakup of Asbestos-Containing Dust Particles by Ultrasonic Agitation", *Environmental Science & Technology*, Vol. 30, Number 10, pages 3010-3015 (1996).

R.J. Lee, T.V. Dagenhart, G.R. Dunmyre, I.M. Stewart, and D.R. Van Orden, "Response to Comment on 'Effect of Indirect Sample Preparation Procedures on the Apparent Concentration of Asbestos in Settled Dusts'", *Environmental Science & Technology*, Vol. 30, No. 4, pp. 1405-1406 (1996).

Oehlert, Gary W., Richard J. Lee and Drew Van Orden, "Statistical Analysis of Asbestos Fibre Counts", *Environmetrics*, Vol. 6, pp. 115-126 (1995).

Lee, R.J., T.V. Dagenhart, G.R. Dunmyre, I.M. Stewart, and D.R. Van Orden, "Effect of Indirect Sample Preparation Procedures on the Apparent Concentration of Asbestos in Settled Dusts", *Environmental Science & Technology*, Vol. 29, No. 7 (1995).

Van Orden, D.R., R.J. Lee, K.M. Bishop, D. Kahane, and R. Morse, "Evaluation of Ambient Asbestos Concentrations in Buildings Following the Loma Prieta Earthquake", *Regulatory Toxicology and Pharmacology*, Vol. 21, pp. 117-121, June (1994).

Lee, R. J., D. R. Van Orden, M. Corn, K. S. Crump. "Exposure to Airborne Asbestos in Buildings." *Regulatory Toxicology and Pharmacology*, Vol. 16, March 1992, pp. 93-107.

Van Orden, D. R., I. M. Stewart, R. J. Lee. "AHERA Quality Assurance Requirements for the Electron Microscopy Laboratory." Presented to the National Asbestos Council, Inc., Sixth Annual Asbestos Abatement Conference and Exposition, Session 42, Anaheim, CA, March 1989.

Lee, R. J., D. R. Van Orden, G. R. Dunmyre (contributing authors). "Assessing Asbestos Exposure In Public Buildings." EPA 560/5-88-002, Washington, D.C., May 1988.

Van Orden, D. R. "Simulation of Continuous Flotation Cells Using Observed Residence Time Distributions." presented to the 1986 Annual Meeting of AIME, New Orleans, LA, 1986; and The Engineering Science Foundation Conference, Henniker, NH, August 1985; published in *Advances in Mineral Processing*, Ed. P. Somasundaran, AIME, 1986.

Austin, L. G., D. R. Van Orden, B. McWilliams, J. W. Perez. "Breakage Parameters of Some Materials in Smooth Roll Crushers." *Powder Technology*, Vol. 28, 1981, pp. 245-251.

Austin, L. G., D. R. Van Orden, J. W. Perez. "A Preliminary Analysis of Smooth Roll Crushers." *International Journal of Mineral Processing*, Vol. 6, 1980, pp. 321-336.

Van Orden, D. R., L. Austin, R. Hogg. "A Method of Correcting Coulter Counter Size Distributions." Proceedings of the Technical Program of International Powder and Bulk Solids Handling and Processing, Philadelphia, PA, May 1979, pp. 161-167.

Austin, L. G., E. Gallagher, M. Celik, J. Shah, D. R. Van Orden. "Description of Breakage Parameters of Coal in Various Laboratory Comminution Machines." Presented to 1978 Annual Meeting of AIIME, Denver, CO, February 1978.