F. MacGregor Miller, President
Cement Etc., Inc.
5252 Golf Course Dr.
Morrison, CO 80465 – 303-697-3470

NARRATIVE RESUME

Educational Background
University of Wisconsin
B.S. Chemistry, 1962
University of Washington
PhD Inorganic Chemistry, 1968

In September 2004, Greg Miller incorporated his services in the new organization Cement Etc., Inc. In July, 2003, he became a private consultant to the cement, concrete and related industries. Prior to that time from April 1998, he was a member of the staff of Construction Technology Laboratories as a senior principal process scientist. From mid-1997 until April 1998 he worked as director of special projects for Chemical Lime Company, Fort Worth TX. Prior to mid-1997, starting in 1994, he was a senior principal scientist in CTL's Materials Research and Consulting Group. In January, 1997, he was promoted to Division Manager, Materials Technology. Dr. Miller brings to his consult-ancy more than thirty years of experience with the cement and concrete industries in manu-facturing process and product development, process troubleshooting, quality beneficiation, beneficial reuse of alternate materials, and solutions to environmental problems.

At CTL, he managed many investigations, including key projects dealing with waste stabilization of hazardous and radioactive wastes, gas phase reactions in the cement rotary kiln system, beneficial reuse of industrial wastes, waste fuels as energy for cement and lime manufacture, fate of organic impurities in the cement raw mix, and sulfur speciation in concrete and in the kiln.

Prior Experience • After he obtained his Ph.D. at the University of Washington, Dr. Miller worked one year at the University of Southern California as a postdoctoral associate. He then accepted a position as research chemist with Marquette Cement Mfg. Co. in Chicago, working on masonry cement workability improvement, use of stack emissions of nitrogen and sulfur oxides for process diagnosis, studies on clinker weathering, and by-product gypsums. In 1973, Dr. Miller joined the Purity Corporation, where he supervised chemical research on the use of low energy scrubbers for particulate control in various industries.

Dr. Miller worked at the Portland Cement Association from 1974 to 1978 as senior research chemist and manager of the Process Development Section in the Chemical Physical Research Department. In these positions he worked with numerous plants on process and energy optimization, studied means for beneficiation of cement kiln dust, conducted cement plant technical audits, coauthored an

exhaustive study on the energy conservation potential in the U.S. Cement Industry, served as principal investigator on federally sponsored projects focused on energy savings, and supervised research on environmentally sound stabilization of wastes.

In 1978 Dr. Miller moved to Scandinavia, where he worked for F.L. Smidth & Co. A/S on circulation of volatile elements in cement kilns and on the burnability of cement raw mixes. Emphasis was placed on the thermodynamics of the system to help optimize the design of preheaters and precalciners.

Dr. Miller returned to the United States in 1981 and took employment with Ideal Basic Industries as Process Operations Director, then Director of Research. His duties included technically assisting in the start-up of two new kiln systems, providing material balance and alkali/sulfur balance information to address buildups, furnishing raw mix assistance to all plants, developing a marketable regulated set cement, and supervising all the services provided to production and sales for all Ideal plants. In 1985, he was promoted to Director of Technical Affairs and in 1986, to Vice President and General Manager of the New Mexico division of Ideal. In this latter position, he had the "bottom-line" responsibility for all operations: production, marketing, and administration.

Dr. Miller returned to the technical arena in 1988 as Ideal's Vice President of Technical Affairs, with overall responsibility for all technical and environmental matters within the company. When Ideal and Dundee Cement Company merged to form Holnam Inc. in 1990, Dr. Miller was transferred to Dundee, Michigan. As Manager of Technical Affairs, he had responsibility for the Holnam waste-derived fuel program. He also managed the submission of required precompliance documentation for the plants at which Holnam wished to institute or continue waste fuels programs.

In 1991, Dr. Miller accepted a position with Southdown, Inc., as Director of Process Engineering. His principal responsibility consisted of managing three compliance certification tests for waste fuel combustion. At the successful completion of these tests, he participated in a team working to optimize technical aspects of the operations at all Southdown plants. In late 1992, Dr. Miller accepted the position of Director of Business Development, Raw Material Substitutes, and Director of Technical Services for Cemtech, LP, a supplier of waste fuels and substitute raw materials to the cement industry. Dr. Miller had responsibility for all raw material substitute activities, with technical support for all other business activities of Cemtech. Dr. Miller left Cemtech to join CTL.

Publications and Professional Activities •

Greg Miller has authored numerous technical reports and scientific papers on raw materials kiln operation, combustion, clinkering chemistry, and environmental issues.

Dr. Miller has been an invited speaker and author of papers at the International Symposium on the Chemistry of Cement, the International Cement Microscopy Association, the annual Rock Products (Cement Americas) and I.E.E.E. technical seminars, PCA technical courses, and American Ceramic Society and ASTM symposia and meetings. He is a member of the American Chemical Society, ASTM, and the Air and Waste Management Association.