

***Appendix 1***

***Summary of Education, Training and Experience of Health Group Members***

***Phillip T. Goad Ph.D., Center for Toxicology and Environmental Health, LLC***

Dr. Goad is a Partner and Senior Toxicologist at the Center for Toxicology and Environmental Health (CTEH), L.L.C. an environmental consulting firm that is an associate of the University of Arkansas for Medical Sciences Bioventures Program. He is also an adjunct assistant professor in the College of Medicine, Division of Interdisciplinary Toxicology, and the Department of Environmental and Occupational Health, College of Public Health, University of Arkansas for Medical Sciences. CTEH is an environmental consulting firm that has several specialties including toxicology and risk assessment. He holds a Bachelor of Science degree in Chemistry from Harding College in Searcy, Arkansas (1977) and a Ph.D. degree in Interdisciplinary Toxicology from the University of Arkansas for Medical Sciences (1982). Since receiving his Ph.D. in Interdisciplinary toxicology he has been actively involved in the area of toxicology. Over the last thirteen years, he has been active as a consultant in the area of human toxicology and have been involved in numerous projects involving the measurement of exposures and the assessment of the effects of chemical exposures on humans. For eight years prior to that, he conducted experimental studies examining the potential toxic effects of chemicals. He is a member of the Society of Toxicology, the Teratology Society, and the Air and Waste Management Association. Dr. Goad has written numerous articles on toxicological and risk assessment subjects. A list of his publications is attached to his curriculum vitae in Appendix 2.

***Alan C. Nye, Ph.D., Center for Toxicology and Environmental Health, LLC***

Alan C. Nye received his doctoral degree in Interdisciplinary Toxicology from the University of Arkansas for Medical Sciences where he completed research on the toxicity of lead. He received post-doctoral training at the Department of Pharmacology at Duke University where he conducted research on the toxicity of free radicals in cultured cells. Dr. Nye is an adjunct assistant professor at UAMS. Dr. Nye has broad experience in assessing chemical exposures and risks to humans and has worked to provide innovative and defensible risk-based evaluations for state and federal superfund sites from New Jersey to California. Dr. Nye is familiar with risk assessment procedures used by all EPA regions and most states in the U.S., and has developed new and innovative models for assessing exposure and risk. In particular, Dr. Nye has specialized in developing practical solutions to sites affected by arsenic, lead, and petroleum hydrocarbons. Dr. Nye has also performed in-depth risk assessments of specific chemicals for corporate clients and trade organizations. A list of his publications is attached to his curriculum vitae in Appendix 2.

***Stephen T. Washburn, Environ Corporation***

Mr. Washburn is a Managing Principal at ENVIRON International Corporation. He has over 18 years of consulting experience in risk-based engineering and risk assessment, with special emphasis on contaminant fate and transport and site remediation. He has provided expert testimony in the areas of risk assessment, incineration, and hazardous waste management. Mr. Washburn was selected by U.S. EPA to serve on the external expert peer review panels for the *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, for the Human Health Risk Assessment for the GE/Housatonic River Site, and for the Multimedia, Multi-pathway, and Multiple Receptor Risk Assessment (3MRA) model developed for the Hazardous Waste Identification Rule (HWIR). He was one of nine scientists selected by the American Society for Testing and Materials (ASTM) to provide training to state regulatory agencies on Risk-Based Corrective Action (RBCA), and assisted in the development of RBCA programs in over ten states. Mr. Washburn has been designated by the U.S. Army Environmental Center as a Subject Matter Expert (SME) in the areas of risk assessment and decision analysis, and has assisted in the technical peer review of over a dozen active and inactive Army installations. He was also a member of the Risk Assessment Subcommittee of the Pennsylvania Science Advisory Board, which was established to encourage brownfields development in Pennsylvania. Mr. Washburn has an M.S. in Chemical Engineering from the Massachusetts Institute of Technology and a B.S.E. in Chemical Engineering from Princeton University. A list of his publications is attached to his curriculum vitae in Appendix 2.

***Joseph Q. Jarvis, MD, MSPH, University of Nevada School of Medicine.***

Dr. Jarvis has experience with indoor air quality issues, including health problems, both as a public health official and as academic clinician and private consultant. Beginning in 1986 as a medical officer for OSHA in the US Dept. of Labor, Dr. Jarvis had responsibility for responding to inquiries about the health effects of indoor air exposures. During the late 1980's, while serving as State Health Officer for Nevada, Dr. Jarvis conducted observational epidemiologic studies of populations within problem buildings, including the Nevada Legislative Building. Thereafter, first as a faculty member at National Jewish Center, and later while affiliated with the University of Nevada School of Medicine, Dr. Jarvis has conducted more than 2 dozen observational epidemiologic studies of the health effects experienced by populations in problem buildings, while clinically evaluating several hundred patients. Dr. Jarvis is a co-author of a peer reviewed study documenting successful remediation of a moldy courthouse wherein he had documented an outbreak of allergic respiratory disease (asthma and hypersensitivity pneumonitis). Dr. Jarvis has an active national consulting practice in occupational and environmental health and teaches public health and community

medicine at the University of Nevada School of Medicine. A list of his publications is attached to his curriculum vitae in Appendix 2.

***Richard S. Blume, M.D., M.P.H., F.A.C.P.M., Sandler Occupational Medicine Associates.***

Dr. Blume is a specialist in occupational and environmental medicine. He is residency-trained and board-certified in occupational medicine and has also trained in internal medicine. In addition, he holds a Masters in Public Health degree. He has experience in both clinical medicine and as a consultant specialist in occupational and environmental medicine. He has been active in the areas of risk analysis and medical surveillance programs. He has presented original research at national conferences on occupational hazard surveillance, environmental risk assessment, occupational lung disease and neurotoxicity. A list of his publications is attached to his curriculum vitae in Appendix 2.

***Bobby J. Gunter, Ph.D., CIH, Rafferty & James***

Dr. Bobby J. Gunter was a Commissioned Officer in the United States Public Health service for 23 years where he worked for the National Institute for Occupational Safety and Health (NIOSH). Dr. Gunter published over 375 Health Hazard Evaluations, as well as articles in peer-reviewed journals. He is the author of the original NIOSH Asbestos Criteria Document and the Carbon Monoxide Criteria Document. He is the primary author of thirteen "Health and Safety Guides" that focus on health and safety hazards in specific industries and is co-author of chapters in several books. Dr. Gunter has presented scientific papers throughout the United States at numerous scientific meetings. Dr. Gunter served as the Course Director for Occupational Health and Industrial Hygiene at the Rollins School of Public Health at Emory University in Atlanta, Georgia from 1989 to 1998. He also directed graduate research for a number of students. In addition, he taught Occupational Health and Industrial Hygiene internationally for the World Health Organization (WHO) and the Pan American Health Organization (PAHO). He is an Adjunct Faculty member at Colorado State University and Oklahoma University School of Public Health. He is Board Certified in the Comprehensive Practice of Industrial Hygiene and is a Fellow of the American Board of Industrial Hygiene. Dr. Bobby J. Gunter has been qualified as an expert for the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), on lead and ammonia. He has been qualified as a mercury expert for the U.S. Department of Justice on a case involving the largest superfund site in the United States. Dr. Gunter has also been qualified as an expert witness on carbon monoxide and hydrogen sulfide. A list of his publications is attached to his curriculum vitae in Appendix 2.