



**ASTM Johnson Conference 2011 on the On-Going Debate: What We're Learning
after a Quarter of a Century of Johnson Conferences**

Sponsored by ASTM Committee D22 on Air Quality

July 25-29, 2011
University of Vermont
Burlington, VT

Conference Co-Chairs: Larry Pierce
Fiberquant Analytical Services
Phoenix, AZ, USA

J. Millette
Mva Scientific Consultants
Lilburn, GA, USA

James Webber
NY State Department of Health
Albany, NY, USA

Harry Rook
Moretown, VT, USA

MONDAY, JULY 25, 2011

8:20 AM

Welcome Remarks

Conference Co-Chairs: L. Pierce, J. Millette, J. Webber, and H. Rook

SESSION I: HUMAN HEALTH AND TOXICOLOGY

Session Moderators: Phillip Cook
US EPA
Duluth, MN, USA

Ron Dodson
Dodson Environmental Consulting, Inc.
Tyler, TX, USA

8:40 AM

Mode(S) of Action of Asbestos and Related Mineral Fibers: A Meeting Summary Report

M. Gwinn, D. DeVoney, A. M. Jarbek, B. Sonawane, C. Bas, and H. Dawson, US EPA, Washington, DC, USA; J. Wheeler, Centers for Disease Control and Prevention, Atlanta, GA, USA; D. N. Weissman, National Institute for Occupational Safety and Health, Morgantown, WV, USA; and S. Masten, and C. Thompson, National Institute of Health Institute, Triangle Park, NC, USA

9:00 AM

Observations from Quantitative Analysis of Tissue Burden for Elongated Particulates by Light and/or Transmission Electron Microscopy as Related to Attribution of Mesothelioma

R. F. Dodson, Dodson Environmental Consulting, Inc., Tyler, TX, USA; L. W. Poye, J3 Resources, Inc., Houston, TX, USA

9:20 AM

Defining Dose across Different Experimental Designs: Fiber Equivalent Diameter and Surface Area

A. M. Jarabek, O. T. Price, B. Asgharian, and S. H. Gavett, US EPA, Research Triangle Park, NC, USA; and P. M. Cook, US EPA, Duluth, MN, USA

9:40 AM

Dosimetry Model of Fiber Inhalability and Deposition in the Human and Rat Respiratory Tract

B. Asgharian, O. T. Price, S. H. Gavett, and A. M. Jarabek, US EPA, Research Triangle Park, NC, USA

10:00 AM

Comparison of Biodurability and Dissolution Mechanisms of Asbestos Minerals from In Vitro Experiments

T. Diedrich, J. Schott, and E. Oelkers, Université de Toulouse, Toulouse, France

10:20 AM Break

10:40 AM

Measurement of Elongated Particle Dissolution Rates and Consequent Size/Shape Distributions Alterations in Support in support of Human Relative Potency Determinations and Human Dosimetry Model Development

P. M. Cook, US EPA, Duluth, MN, USA; J. K. McGee, S. H. Gavett, and A. M. Jarabek, US EPA, Research Triangle Park, NC, USA

11:00 AM

Unique Fiber, Unique Health Effects

B. Black, Center for Asbestos Related Disease, Libby, MT, USA

11:20 AM

Persistent Elongated Particle Total Surface Area Dose to Rat Pleura is Optimum Predictor of Mesothelioma Incidence

P. Cook and M. Etterson, US EPA, Duluth, MN, USA; J. Swintek, T. Dawson, and D. Chapman, EMR, Inc, Duluth, MN, USA

11:40 AM

Inhalation Exposure of Rats to Libby Amphibole (LA) and Amosite Asbestos

S. H. Gavett and A. M. Jarabek, US EPA, Research Triangle Park, NC, USA; E. W. Tewsbury, E. Burmudez, V. A. Wong, E. A. Gross, and D. E. Dodd, The Hammer Institutes for Health Sciences, Research Triangle Park, NC, USA; and G. A. Wilson and H. G. Wall, Experimental Pathology Laboratories, Inc., Research Triangle Park, NC, USA

12:00 PM

Responses of Fischer Rats to Intratracheal Instillations of PM_{2.5} Samples of Libby Amphibole (LA), Amosite, Sumas Mountain Chrysotile, El Dorado Tremolite, and Ontario Actinolite

J. M. Cyphert, D. J. Padilla-Cardin, and J. H. Shannahan, UNC School of Medicine, Chaple Hill, NC, USA; M. C. Schladweiler, U. P. Kodavantiand, S. H. Gavette, U. S. EPA, Research Triangle Park, NC, USA; and A. Nyska, Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

12:20 PM Lunch (On Your Own)

[Monday Afternoon]

Session II: Real-World Application of Science to Decision Making

Session Moderator: Julie Wroble
 US EPA
 Seattle, WA, USA

1:50 PM

Evaluation of Cancer Mortality Risk and Derivation of an Inhalation Unit Risk (IUR) for Libby Amphibole Asbestos

D. DeVoney, T. Bateson, L. Kopylev, M. R. Gwinn, G.S. Cooper, R.C. Dzubow, and B. Sonwane, US EPA, Libby, MT

2:10 PM

The Sumas Mountain Asbestos Site: An Update of the Swift Creek Case Study

J. Wrobel, US EPA, Seattle, WA, USA

2:30 PM

Obscured Non-Countable Asbestos Particulates - Can They be Measured and Counted?

J. Harris, LabCor, Seattle, WA, USA

2:50 PM

Assessment of Excess Lifetime Cancer Risks by ABS from Daily Activities at Past Asbestos Mining Areas in Korea

H. Kim, S.-C. Lee, D.-J. Kim, Y.-S. Yoon, and S.-H. Kang, The Catholic University of Korea, Seoul, Korea

3:10 PM Break

3:30 PM

Real-World Application of Science to Decision Making: Asbestos at the Mount Norris Camp, Eden, VT

M. McDonough, US EPA, Boston, MA, USA

3:50 PM

Weatherization of Houses Containing Vermiculite or Other ACM

T. Spear, Montana Tech, Butte, MT, USA

4:10 PM

Comparison between Particle Size Distribution of the Sodium Chloride and the Paraffin Oil Aerosols and the Particle Size Distribution of Asbestos Produced During Different Asbestos Abatement Process

M. Misseri, P. Bontemps, and J. Prieur, Ascal Eurofins, l'Argentière, France

4:30 PM

Health Effects from Asbestos Exposure in Brazil and the Current Situation of Mining, Manufacture and Use of Asbestos Products in the Country

E. De Capitani, State University of Campinas, São Paulo, Brazil; and E. Algranti, Ministry of Labor, São Paulo, Brazil

4:50 PM

Methodology of Asbestos Exposure Risk Assessment among Workers of the Italian State Railway Company

A. Barracchini, C. Guarino, L. Triggiani, F. Bevere, and F. Palumbo, Italian Ministry of Health, Rome, Italy

5:10 PM

The Right Exposure Metric For Asbestos: We Almost Have an Answer!

W. Berman, Aeolus, Inc. Albany, CA, USA

6:30 PM

Reception

TUESDAY, JULY 26, 2011

[Morning Session]

Session III: Monitoring/Remediation

Session Moderator: Tom Laubenthal
The Environmental Institute
Marietta, GA, USA

Andy Oberta
Environmental Consultancy
Austin, TX, USA

8:40 AM

Managing Asbestos Issues: The Regulators and the Regulated Our Similarities and Differences

T. Laubenthal, The Environmental Institute, Marietta, GA, USA; and J. Wroble, U.S. EPA, Seattle, WA, USA

9:00 AM

Orofino Asbestos Sites: A Case Study of an EPA Removal Action

E. Liverman, US EPA, C'ouer d' Alene, ID, USA

9:20 AM

Making Field Decisions with Current Practice: The Powhatan Mining Company Clean-Up

J. Kelly, US EPA Region III, Philadelphia, PA, USA

9:40 AM

Proposed Israeli Prevention of Asbestos Hazards Law

N. Dori and T. Bar-On, Ministry of Environmental Protection, Jerusalem, Israel

10:00 AM

Use of ASTM D6480 and D7390 to Evaluate Asbestos Contamination from an Industrial Accident

R. Morse, Morse Zehnter Associates, Troy, NY, USA

10:20 AM Break

10:40 AM

A Practical Proposal for Proper Maintenance and Cleaning in Safety of Asbestos Cement Chimneys

S. Clarelli, ASSOAMIANTO, Milan, Italy

11:00 AM

Mobile Laboratory Use during Superfund Inspection: Features and Benefits

F. Paglietti, S. Malinconio, V. Di Molfetta, F. Gennari, P. De Simone, F. Cassandra, S. Bellagamba, F. Damiani, Italian Institute for Occupational Health and Safety, Italy; M. Giangrasso, Italian Ministry of Environment and Land and Sea Protection, Italy

11:20 AM

Asbestos Waste Landfill Closure: Capping and Landscape Restoration

S. Lerman, Ben-Gurion University, Beer-Sheva, Israel; and U. Peled, G. Nagola, Etanit Building Products, Nahariya, Israel

11:40 AM

1,463 homes down, 34,998,540 to go! A case study on VAI in Alaska

R. French, Eagle River, AK

POSTERS I: HEALTH, RISK, REGULATORY

12:00-12:40 PM

Revisiting Klamath Falls: what a difference the right model makes

D. Wayne Berman, Aeolus, Inc. Albany, CA, USA

Summary of Current Research into the Environmental Health and Safety Effects of Nanoparticles and Parallels to Asbestos

Frank Ehrenfeld, International Asbestos Testing Laboratory, Mount Laurel, NJ, USA

Derivation of a Reference Concentration (Rfc) for Libby Amphibole

Robert Benson and David L. Berry, US EPA Region 8, Denver, CO, USA

Systemic and Vascular Alterations in Rat Models Exposed to Libby Amphibole

Urmila P. Kodavanti, W. Winnik, D. Andrews, M. C. Schladweiler, J. H. Shanahan, R. Thomas, S.H. Gavett, D. Carlin, J. Cyphert, and O. Alzate, ES EPA, Research Triangle Park, NC, USA

An Overview of the NIOSH Roadmap

Paul J. Middendorf, CDC/NIOSH, Cincinnati, OH, USA

Contamination of Libby's Air in Time and Space

James Webber, NY State Department of Health, Albany, NY, USA

Results of OSHA Compliance Monitoring for Asbestos from 1984

Dan Crane, USDOL-OSHA, Sandy, UT, USA

Dissolution Kinetics of Tremolite in Mimicked Biological Conditions

M. Rozalen, F. J. Huertas, and F. Gervilla, University of Granada, Granada, Spain; S. Fiore, IMAA-CNR, Tito Scalo, (PZ), Italy; and t. Kerestedjian, Bulgarian Academy of Science, Sofia, Bulgarian

TUESDAY, JULY 26, 2011

[Evening Session]

SESSION IV: INTERNATIONAL & DOMESTIC METHODS

Session Moderator: Eric Chatfield
Chatfield Technical Consultants
Mississauga, ON, Canada

7:00 PM

A Rationale for Fingerprinting Chrysotile

M. van Alphen, University of South Australia, Australia

7:20 PM

Asbestos Measurement Techniques Monitoring Ambient and Indoor Air using SEM, Methods and Results of a First International PT Scheme

R. Koenig, APC GmbH, Eschborn, Germany; L. Davies, HSL Buxton, Great Britain; N. Hoefert, VDI, Düsseldorf, Germany; and J. Tempelman, TNO, Utrecht, Netherlands

7:40 PM

Expanding the Capabilities of Scanning Electron Microscopy for Asbestos Analysis Through the Use of Electron Backscatter Diffraction

B. Bandli and M. E. Gunter, UMD Geological Science, Duluth, MN, USA

8:00 PM

Comparative study between JIS A 1481 and ISO/DIS 22262-2

N. Toyama and H. Kamemoto, Tokyo Occupational Safety and Health Center, Kameido-ku, Tokyo, Japan

8:20 PM

X-Ray Diffraction of Erionite

W. J. Miles, Miles Industrial Mineral Research, Denver, CO, USA

8:40 PM

The OSHA Scheme for Integrated Asbestos Analysis

D. Crane, USDOL-OSHA, Sandy, UT, USA

9:00 PM

Differential Counting at OSHA: An Illustration of Method ID

D. Halterman, US Department of Labor, Sandy, UT, USA

9:20 PM

Analysis of Talc Containing Trace Amounts of Amphibole

J. W. Pier and E. F. McCarthy, Rio Tinto Minerals, Greenwood, Village, CO, USA

9:40 PM

Development of a New Method for the Analysis of Cosmetic Talc for Asbestos

J. W. Pier, Rio Tinto Minerals, Greenwood Village, CO, USA; G. P. Tomaino, Minerals Technologies, Inc., Easton, PA, USA; L. P. Solebello, Jr., International Asbestos Testing Laboratory, Inc., Mount Laurel, NJ, USA; J. R. Millette, MVA Scientific Consultants, Duluth, GA, USA

WEDNESDAY, JULY 27

[Morning Session]

SESSION V: VERMICULITE ATTIC INSULATION, AND NATURAL OCCURRENCES OF ASBESTOS

Session Moderators: Jeanne Orr
 Reservoirs Environmental
 Denver, CO, USA

 Alan Segrave
 Bureau Veritas North America, Inc.
 Kennesaw, GA, USA

8:40 AM

Asbestos-Contaminated Soils Management in Australia

J. Howell, Western Australia Department of Health, Perth, Western Australia, Australia; R. McFarland, AECOM, Perth Western Australia, Australia

9:00 AM

Amphibole Asbestos Soil Contamination in the USA: A Matter of Definition

B. Thompson, University of Idaho, Moscow, ID, USA; M. E. Gunter, University of Vermont, Burlington, VT, USA; and M. Wilson, USDA-Natural Resources Conservation Service, Lincoln, NE, USA

9:20 AM No

Fluidized Bed Asbestos Segregator - Application of the FBAS to Testing Asbestos Containing Soils

D. L. Berry and N. Bein, US EPA, Region 8, Denver, CO, USA; W. Brattin, SRC Inc., Denver, CO, USA; and J. Januch, US EPA, Region 10, Port Orchard, WA, USA

9:40 AM

The Asbestos Characteristic in Asbestos Mine Circumstance Soil. The Asbestos Characteristic in Talc

H. -J. Lim, K.-H. Choi, D.-J. Kim, National Institute of Environmental Research Seo-gu, Incheon, Korea; D.-J. Dong, Ministry of Environment, Seo-gu, Incheon, Korea; and G.-S. Jeon, Korea Environment Corporation, Seo-gu, Incheon, Korea

10:00 AM

A Comparison of Asbestos in Soil Methods

E. Cahill, EMSL Analytical, Inc., Cinnaminson, NJ, USA

10:20 AM Break

10:40 AM

Asbestos in Soil Analytical Method and Results of Three Round Robin Studies

A. M. Segrave, Bureau Veritas North America, Inc., Kennesaw, GA, USA; and O. S. Crankshaw, RTI International, Research Triangle Park, USA

11:00 AM

Aerosolization of Asbestos from Soil Using the Releasable Asbestos Field Sampler (RAFS)

W. M. Barrett and J. Konz, US EPA, Cincinnati, OH, USA; J. R. Kominsky, Environmental Quality Management, Inc., and J. W. Thornburg, RTI International, Research Triangle Park, NC, USA

11:20 AM

Geology and Public Health: The Case of Vermiculite Attic Insulation

M. Getman, New York State Department of Health, Albany, NY, USA

11:40 AM

Soil Contamination with Asbestos in Korea: Causes, Issues and Legislation

D. J. Kim, Ministry of Environmental Gwacheon, Korea; C. H. Lee, J. Y. Moon, S. J. Choi, and G. S. Jeon, Korea Environmental Corporation, Incheon, Korea

POSTERS 2: ANALYTICAL, MONITORING

12:00-12:40 PM

The Distribution of Natural Occurrences of Asbestos in the United States

Bradley S. Van Gosen, USGS, Denver, CO, USA

You can have it all and more: What We Have Learned about the Performance of the Modified Elutriator Method

D. Wayne Berman, Aeolus Inc., Albany, CA, USA

Polarized Light Microscopy Differentiation of Erionite from other Fibrous Zeolites

Lou Solebello and Gary P. Tomaino, Minerals Technologies Inc., Easton, PA, USA

Asbestos-Contaminated Soil Regulations in Colorado

Colleen Brisnehan, US EPA, Denver, CO, USA

Review of Recent Trace Level Spiking Studies and Evaluations Using XRD, PLM, and/or TEM for Asbestos in a Cosmetic Talc Product

Gary P. Tomaino, Minerals Technologies Inc., Easton, PA, USA; J. Pier, Rio Tinto Minerals, Greenwood, Village, CO, USA; J. Millette, MVA Scientific Consultants, Lilburn, GA, USA; L. Solebello, International Asbestos Testing Laboratory, Inc.

Chinese Asbestos Insulation Material

Mike Cooper, Exponent, Menlo Park, CA, USA

Progress Toward a Master Reference for Asbestos at OSHA

Dan Crane, USDOL-OSHA, Sandy, UT, USA

Comparative Effect of Ph on the Dissolution Kinetics of Tremolite, Anthophyllite and Chrysotile

M. Rozalén, F. J. Huertas, M.D. Henrnández -Corblan, F. Gervilla, University of Granada, Granada, Spain;
S. Fiore, IMAA-CNR, Tito Scalco (PZ), Italy; T. Keretedjian, Bulgarian Academy of Science, Sofia,
Bulgaria

THURSDAY, JULY 28, 2011

[Morning Session]

SESSION VI: LITIGATION INVOLVING SCIENCE

Session Moderator: Steve Hays
Gobbell Hays Partners, Inc
Nashville, TN, USA

Drew Van Orden
R J Lee Group, Inc.
Monroeville, PA, USA

8:40 AM

Asbestos in Surface Dust: Part III

W. M. Ewing and C. DePasquale, Compass Environment, Inc., Kennesaw, GA, USA

9:00 AM

Comparison of Asbestos Fiber Size Distributions in Settled Dust Samples and Corresponding Air Samples

W. E. Longo, M. D. Mount, R. Hatfield, Materials Analytical Services, LLC, Suwanee, GA, USA

9:20 AM

Asbestos, the Killer for Humans and the Environment

E. Bonanni, Rome, Italy

9:40 AM

A Case Study of Asbestos Exposure Due to Scientific Research

S. P. Compton, MVA Scientific Consultants, Duluth, GA, USA

10:00 AM

Dose Reconstruction for Mesothelioma Cases in Texas

S. Kenoyer, Gobbell Hays Partners, Inc., Nashville, TN, USA

10:20 AM Break

10:40 AM

Exposure to Brake Dust and Malignant Mesothelioma: Lung-Retained Fibre Analyses Using Transmission Electron Microscopy Confirm Role for Unsuspected Commercial Amphibole Exposures

B. W. Case, McGill University, Montreal, Quebec, Canada

11:00 AM

Tremolite in Current Building and Mineral Products. Is it Asbestos?

E. J. Chatfield, Chatfield Technical Consultants, Mississauga, ON, Canada; and F. E. Ehrenfeld III. International Asbestos Testing Laboratories, Mt Laurel, NJ, USA

11:20 AM

An Asbestos Exposure that Wasn't

E. J. Chatfield, Chatfield Technical Consultants, Mississauga, ON, Canada

11:40 AM

Investigating Violations of EPA Asbestos Regulations

P. Forney, US EPA Denver, CO, USA

POSTERS 3: DEFINITION, LITIGATION

12:00-12:40 PM

Effect of Indirect Preparation on Libby Amphibole TEM Results

David L. Berry and Nicole Bein, Mary Goldade, Wendy O'Brien, William Brattin, and Lynn Woodbury, US EPA, Denver, CO, USA

The Wide, Wide World of Asbestos: Where to Find (or Buy) the Good Stuff!

Sean Fitzgerald, Scientific Analytical Institute, Inc., Kernersville, NC, USA

Observations and Suggestions to Improve ISO Counting Rules

Kate March and John Harris, LabCor, Seattle, WA, USA

Assessment of Representative Laboratory Soil Sub-Sample Collection Methods: Riffle Splitting Vs. Three-Dimensional Turbula-Type Mixing

R. Mark Bailey, TEM Laboratories, Inc., Berkeley, CA, USA

The History of Asbestos Rulemaking

Dan Crane, USDOL-OSHA, Sandy, UT, USA

Key Legal Rulings on Asbestos at OSHA

Dan Crane, USDOL-OSHA, Sandy, UT, USA

Tremolite Content of Talc by X-Ray Diffraction

Beom-Goo Wang, Korea testing and Research Intitute, Gimpo, Korea

Investigation of Fiber Counts Due to Fiber Migration for Phase Contrast Microscopy

Eun Gyung (Emily) Lee, USN Naval Air Warfare Ctr, Patuxent River, MD, USA; J. Nelson, and M. Harper, CDC, NIOSH, Morgantown, WV, USA

THURSDAY, JULY 28, 2011
[Evening Session]

SESSION VII: ANALYSIS AND QUALITY ASSURANCE

Session Moderator: Owen Crankshaw
RTI International
Research Triangle Park, NC

7:20 PM

Evaluation of Relocatable Reference Slides Prepared from AIHA PAT Samples by Five National Asbestos Proficiency Testing Providers

T. W. S. Pang, Ryerson University, Toronto, ON, Canada; M. Harper, CDC NIOSH, Morgantown, WV, USA; E. G. Lee, USN Naval Air Warfare Ctr, Patuxent River, MD, USA

7:40 PM

Asbestos Detectability: Will the Real Limits of Detection Please Stand Up?

S. Fitzgerald, Scientific Analytical Institute, Inc., Kernersville, NC, USA

8:00 PM

Measuring the Amount of Bias Present in Direct and Indirect Preparations of Airborne Environmental Asbestos Samples

J. Harris, LabCor, Seattle, WA, USA

8:20 PM

Production of Filters Quantitatively Loaded With Airborne Asbestos

J. Thornburg and O. S. Crankshaw, RTI International, Research Triangle Park, NC, USA; J. Konz and T. Smith, US EPA, Washington, DC, USA; A. Castelli, US EPA, Cambridge, MA, USA; W. Barrett, US EPA, Cincinnati, OH, USA

8:40 PM

Cellulose Ester Filter Quality Issues

E. J. Chatfield, Chatfield Technical Consultants, Mississauga, ON, Canada

9:00 PM

Verified Analysis as a Tool for Absolute Identification of TEM Analysis Problems

S. S. Dorn and O. S. Crankshaw, RTI International, Research Triangle Park, NC, USA

9:20 PM

Effect of Size Reduction Processes on the Apparent Fiber Content from Rock Samples

D. R. Van Orden, J. M. Wilmoth, and M. Sanchez, R J Lee Group, Inc., Monroeville, PA, USA

9:40 PM

Common Technical Deficiencies Cited During Onsite Assessments of Asbestos Testing Laboratories

L. J. Carhart and J. S. Webber, New York State Department of Health, Albany, NY, USA

FRIDAY, JULY 29, 2011

[Morning Session]

SESSION VIII: DEFINITIONS/ NOMENCLATURE

Session Moderators: Micky Gunter
University of Idaho
Moscow, ID, USA

Greg Meeker
USGS
Denver, CO, USA

8:40 AM

A Survey of Fibrosity of Fibrous Amphiboles

L. S. Pierce, Fiberquant Analytical Services, Phoenix, AZ, USA

9:00 AM

Considerations of Aspect Ratio as a Counting Rule Criteria for Asbestos Analysis

J. R. Millette, Mva Scientific Consultants, Lilburn, GA, USA

9:20 AM

Separating Cleavage Fragments from Asbestos Fibers under PCM

M. Harper CDC, NIOSH, Morgantown, WV, USA; and E. Lee, USN Naval Air Warfare Center, Patuxent River, MD, USA

9:40 AM

Talc-Anthophyllite- "Talcboles" from the Northwest Adirondacks- What are they and where did they come from?

M. Rutstein, State University of New York at New Paltz, Paltz, New York, USA

10:00 AM

Compositional Patterns in Crocidolite Chemistry

M. Van Alpen, University of South Australia, Australia,

10:20 AM Break

10:40 AM

Differential Counting at OSHA

D. Crane, USDOL-OSHA, Sandy, UT, USA

11:00 AM

Asbestos, Asbestine, and Mineral Nomenclature: Analysis of a Mystery Assemblage and the Challenges of Regulating Natural Materials

D. Halterman, US Department of Labor, Sandy, UT, USA

11:20 AM

Seeking Asbestos Reference Materials

M. Harper, CDC, NIOSH, Morgantown, WV, USA; and B. Van Gosen

11:40 AM

Talc Pseudomorphs and Terminology

G. P. Tomaino, Minerals Technologies Inc., Easton, PA, USA

Friday, July 29

[Afternoon Session]

SESSION IX: DEFINITION WORKSHOP/ WRAP-UP

Session Moderator: Martin Harper
CDC, NIOSH,
Morgantown, WV, USA

1:40 PM

The Johnson Conference: A 25 Year Love Affair with Asbestos

H. L. Rook, Moretown, VT, USA

2:00 PM

Refining Mineralogical Terminology for Use in the Many Worlds of Asbestos

M. Gunter, USGS, Denver, CO, USA, and G. Meeker, University of Idaho, Moscow, ID, USA; and University of Vermont, Burlington, VT, USA

2:20-3:20 PM

Round Table

M. Harper, CDC, NIOSH, Morgantown, WV, USA; M. Gunter, and G. Meeker

3:20-3:30 PM Break

3:30-5:00 PM

Open Forum

5:05 PM

CONFERENCE ADJOURNS