NATIONAL STONE, SAND & GRAVEL ASSOCIATION

*Natural building blocks for quality of life*

June 27,2002

Mr. Marvin Nichols
Director, Office of Standards, Regulations and Variances
Mine Safety and Health Administration
1100 Wilson Boulevard, 21st Floor
Arlington, Virginia 22209-3939



RE: Asbestos ANPRM

Dear Mr. Nichols:

The National Stone, Sand and Gravel Association (NSSGA) appreciated the opportunity to provide testimony to the Mine Safety and Health Administration regarding its ANPRM for asbestos. We trust that our testimony will assist the agency in drafting its proposed rule. In addition to the testimony and documents provided to MSHA during the June 20th public hearing in Charlottesville, Virginia, we are submitting the attached list of documents as supplemental information supporting the testimony that was given.

NSSGA's primary emphasis during its testimony was the need for MSHA to adopt a correct mineralogical definition of asbestos and a appropriate analytical approach for analyzing air and bulk samples collected from mines. The air sampling analytical method needs to incorporate a PCM screening step that is inclusive of asbestiform mineral particles and as exclusive as possible of non-asbestiform particles. We firmly believe that Drs. Ann Wylie, Eric Chatfield and Richard Lee's testimony provide the science and support for this approach. If MSHA desires to test the methodology advocated, we suggest that MSHA contract the work with NIST. NIST is the certification entity for the National Voluntary Laboratory Accreditation Program (NVLAP), and this organization is very familiar with the complexities of dealing with naturally occurring asbestos versus other research organizations that have primarily focused on commercial asbestos issues and exposures.

We are hopeful that MSHA will provide the clarity that has been missing in this important area of occupational and public health, and that its proposal will reflect the science that necessitates a change in the misuse of the simplistic federal fiber counting criteria as an asbestos definition.

Enclosures

Jim
We have received all of your package
Marvin Nichols

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1. NSSGA testimony during 1990 OSHA hearings
2. NSSGA post-hearing brief of OSHA hearings
3. Pictorial Mineralogical Exhibit "The Asbestiform and Nonasbestiform Mineral Growth Habit and Their Relationship to Cancer Studies"
4. Epidemiological Studies of Mining Populations Exposed to Non-asbestiform Amphiboles, January 22,1988, W. Clark Cooper, M.D.
5. A Review of the Literature on the Carcinogenicity of Asbestiform and Non-asbestiform Actinolite, Tremolite and Anthophyllite, February 4,1988, Environmental Health Associates, Inc.
6. Regulating Non-asbestiform Minerals as Asbestos- The Impact on the Construction Aggregate Industry and its Users, January 25,1988, Kelly F. Bailey
7. Testimony and Supporting Documents of Dr. Richard J. Lee, 1990 OSHA Hearings
8. Testing of a Proposed PCM Screening Method for Discriminating Between Asbestos and Nonasbestos Actinolite, Tremolite and Anthophyllite, Richard J. Lee, December, 1990.
9. Letter to Daniel Crane, OSHA Laboratory Supervisory Physical Scientist from Kelly F. Bailey, Manager, Occupational Health, Vulcan Materials Company, April 10,1989
10. Letter to Kelly F. Bailey from Daniel Crane, May 16,1989.
11. A Definition for Asbestos, Malcolm Ross, et. al.
12. Fiber Length and Aspect Ratio of Some Selected Asbestos Samples, Ann Wylie, 1979.
13. The Effect of Aspect Ratio on Fiber Counts - A Preliminary Study, A.A. Winer, 1979.
14. Factors Affecting Incompatibility of Airborne Fiber Concentration Determinations of the Same Atmosphere by PCM and TEM, Owen Crankshaw, 1989.
15. An Analysis of the Aspect Ratio Criterion for Asbestos Fiber Counting, Ann Wylie
16. Relationship of Mineral Habit to Size Characteristics for Tremolite Cleavage Fragments and Fibers, BOM Report 8367, William J. Campbell, et. al. 1979.
17. Consequences of Using Improper Definitions for Regulated Minerals, C. Sheldon Thompson
18. The "Asbestos" Minerals: Definitions, Description, Modes of Formation, Physical and Chemical Properties, and Health Risk to the Mining Community, Malcolm Ross, 1978.
19. Review and Comments on the Evidence for Human Health Effects from Exposure to Non-asbestiform Tremolite, Actinolite, and Anthophyllite and the Regulation of Occupational Exposures, July 11,1988, Brian Boehlecke, M.D.
20. Review - Asbestos Exposure Indices, Morton Lippmann, 1988.
21. Airborne Asbestiform Minerals in the Non-occupational Environment, August, 1976, W. Clark Cooper, M.D.
22. Size and shape of airborne asbestos fibers in mines and mills, C.Y. Hwang, 1983.
23. Distinguishing Between Amphibole Asbestos Fibers and Elongate Cleavage Fragments of Their Non-asbestos Analogues, A.M. Langer, et. al. 1991.
24. Naturally Occurring Asbestos Issues in The Aggregates Industry: Fact and Fiction, February, 2002 SME Presentation, Kelly F. Bailey
25. Manual of Mineralogy, 20th Edition, Cornelius Klein and Cornelius Hurlbut, Jr. pp. 410-418
26. Chemical and Physical Characterization of Amosite, Chrysotile, Crocidolite, and Non-fibrous Tremolite for Oral Ingestion Studies by the National Institute of Environmental Health Sciences, BOM Report of Investigations 8452, William J. Campbell, et. al.
27. Association of Tremolite Habit with Biological Potential: Preliminary Report, R. P. Nolan, et. al., 1991.
28. Testimony of the National Aggregates Association/National Ready Mixed Concrete Association, April 6,1990, OSHA Hearings

29. Testimony of the Institute of Occupational Medicine, john Addison, April 9, 1990, OSHA Hearings.
30. Nonasbestiform Amphibole Cleavage Fragments - Carcinogens or Not? Abstract, American Mining Congress and National Stone Association
31. Developments in Dust Sampling and Counting Techniques in the Asbestos Industry, S. Holmes, 1965.
32. Distinguishing Asbestiform Tremolite from Non-asbestiform Tremolite, A. M. Langer and R.P. Nolan.
33. A Reanalysis of the Stanton et al. Pleural Sarcoma Data, Gary W. Oehlert, 1991.
34. Curriculum Vitae of Ann Gilbert Wylie (2002).
35. Eric J. Chatfield: Curriculum Vitae (2002).
36. Professional Technical Record of Malcolm Ross, Ph.D. (2002)
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38. Testimony to MSHA's Asbestos Hearing Panel from the NSSGA, June 20,2002, Charlottesville, VA.
39. Selected Silicate Minerals and Their Asbestiform Varieties, W. J. Campbell, R.L. Blake, L.L. Brown, E.E. Cather, and J.J. Sjoberg.
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51. Minerals and Health: The Asbestos Problem, Malcolm Ross.