Importance of Fiber Dimensions?

- NIOSH 7400 fiber size cutoff is based on the limitation of the method
 - Short, thin fibers not exonerated no epidemiology
 - Davis et al (1988) suggests short chrysotile is more potent
 - Yeager et al (1983) suggests short fibers more cytotoxic.
- Substantial human evidence looking at pleural tissue in cases of mesothelioma suggest a role for fibers >5 microns
 - Suzuki (2002; 2005)
 - Dodson (2003)

Importance of Biopersistence?

- Biopersistence data must correspond with the target organ to be meaningful
 - Pleura for mesethelioma Churg, Roggli, others not applicable
 - Lung for lung cancer etc.
- Must use TEM for tissue fiber burden analysis because short, thin fibers are missed with Scanning Electron Microscopes
 - SEM data is inaccurate/unreliable
 - SEM misses fibers which TEM detects

Importance of Biopersistence?

 Chrysotile has short half life in the lung and causes lung cancer

- Does biopersistence matter at all?
 - Chrysotile causes lung cancer
 - Chrysotile causes mesothelioma
 - No safe level identified for any asbestos type

NIOSH should not rely on potency estimates obtained through meta-analyses of unreliable dose data

- Dose Data from Historical Epidemiology Based on Midget Impinger and Visual is Unreliable.
 - McGill studies unreliable dose estimates. Egilman et al (2003)
 - Crocidolite dose estimates "guesstimations." Hodgson and Darnton (2000)
- Berman and Crump (EPA 2003) rely on inaccurate dose data and secret industry data – Garbage-in, Garbage-out.
 - Comparing inaccurate doses estimates for different fiber types in epidemiological studies offers confusion and misinformation, rather than additional knowledge

Meta-Analysis is Subject to Manipulation

- Authors choose the data to meta-analyze which opens the process up to influence
- Meta-Analysis is only as good as the data inputs and may amplify the problems with data

 Must be watchful for overstated significance of data.

Meta-Analysis is Subject to Manipulation

- Need thorough, <u>meaningful peer-review</u> by disinterested parties (no real or apparent conflicts of interest). <u>No industry litigation-scientists</u> or <u>industry front groups</u>.
 - No Bruce Case, James Crapo, Ernest McConnell, Arthur Langer, Bertram Price, Kenny Crump, David Bernstein, Dennis Paustenbach, R.J. Lee, Mary Jane Teta, Patrick Hessel or any corporate consultants like Exponent, Chemrisk, Environ
 - No industry front groups like the AIA/NA; International Environmental Research Foundation

Talc/FLCF Cause Disease?

- Need the data from RT Vanderbilt mine/mill experience. Evidence suggest RTV talc is a potent carcinogen
- Why is RTV violating court orders in Illinois and Kentucky forcing them to disclose the occupational diseases at their facility?
- NIOSH should not pass judgment on FLCF without the RT Vanderbilt data
- Speakers with contacts to RTV should be asked about knowledge of RTV talc workers

In 1975 they placed a asbestos caution on their TALC products

496 R T VANUERULL ---30 WINFIELD STREET NORWALK, CONNECTICUT OB855 January 2, 1975 Georgia-Pacific Corporation 900 South West Fifth Avenue Portland, Oregon 97204 Attention: Mr. Edward L. Aasen Purchasing Managor Gentlemen: In the course of our assuming the business of the former International Tale Company, we will continue to market five fibrous (asbestiform) type talcs previously supplied by them, namely: Fiber #1

2. Fiber #2 3. Mouldene 4. 6N Fiber 5. PL Fiber

We intend to label hags containing these products with an Asbestos CAUTION Label as follows:

CAUTION-PRODUCT CONTAINS ASBESTOS FIBERS. AVOID CREATING DUST. BREATHING ASBESTOS DUST MAY CAUSE SERIOUS BODILY HARM.

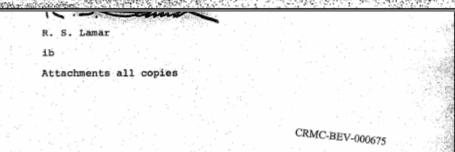
As you know, the storal fibers present in these grades, which make them assistially useful, are the asbestiform Now and for the Last 2 decades no Asbestos warning Accompanies their Talc products

Why?

Because they claim "no asbestos"

JMI	Johns-Manville	Int	an da		Talc rrespo	i. Nako	enc	8
To:	E. M. Fenner, 1-06			Date:	February	18,	1977	
From:	R. S. Lamar, 3-05							tale of the second s
Copies:	J. H. Swensen, J. P.	Leineweber,	w. c.	Streil	D, D, C			
Subject:	Paper by C. S. Thomps "Asbestos in Your Put							

I object strongly to an earlier statement on page three regarding "misinformation" supplied by a competior. Furthermore, in all of Thompson's <u>gobbledygook</u> regarding the mineralogy of Vanderbilt's "talc" at no point does he admit to the fact that their "talcs" contain not only fibrous tremolite but chrysotile and anthophyllite as I'm afraid that Dr. Thompson long ago gave up any professional ethics he might have had and is now persisting with a program that is not only technically false but even more tragic morally and ethically wrong. He totally ignores the <u>medical</u> consequences of his immorality.



Did RT Vanderbilt give Honda all the data?

Ass. occup. Hyg., Vol.46, No. 7, pp. 575–585, 2012 © 2002 Eviteh Occupational Hygines Society Published by Occupational Reviewity Press DOI: 10.1002/marking/science305

Mortality among Workers at a Talc Mining and Milling Facility

YASUSHI HONDA¹*, COLLEEN BEALL², ELIZABETH DELZELL², KENT OESTENSTAD³, ILENE BRILL² and ROBERT MATTHEWS²

¹Environmental Health Sciences Program, Institute of Health and Sport Sciences, University of Taukuba, Taukuba 305-8574, Japan; ²Department of Epidemiology, University of Alabama at Birmingham School of Public Health, Birmingham, AL 35294-0022, USA; ³Department of Environmental Health Sciences, University of Alabama at Birmingham School of Public Health, Birmingham, AL 35294-0022, USA

Received 15 August 2001; in final form 6 May 2002

Background: This study evaluated mortaility among workers at a tak mining and milling facility.

Methods: Subjects were while men actively employed between 1948 and 1989 and known to have been alive in or after 1950. Analyses messes d cancer mortality during the period 1950-89 (809 subjects) and non-cancer mortality during 1960-89 (782 subjects).

Results: Comparisons with regional general population death rates for 1966-89 indicated that the workers had more than expected deaths from all causes combined [209 observed/160 expected, standardized mortality ratio (SMR) = 131, 95% confidence interval (C1) = 114-156), due mainly to increased mortality from lung cancer (31/13, SMR = 232, CI = 157-329) and nonmalignant respiratory disease (NMRP) (28/13, SMR = 231, CI = 147-320). The lung cancer excess was concentrated in miners (18/46, SMR = 394, CI = 230-642); millers had only a small increase (75.5, SMR = 128, CI = 51-263). An excess of NMRD occurred both in miners (10/4.2, SMR = 241, CI = 116-444) and in millers (11/48, SMR = 227, CI = 113-407). The median estimated encourse in a root and in the first (11/48, SMR = 127, CI = 113-407). The median estimated encourse in a root and the first formation for a similar state.

Acknowledgements—This study was supported by a research contract with the R.T. Vanderbilt Co. Inc.

> Incurry in openie two Text, Fon recorpective follow-up studies (Brown and Wagoner, 1978; Stille and Tabershaw, 1982; Lamm et al., 1983; Brown et al., 1990) and one nested case-control study of lung cancer (Gamble, 1993) previously assessed the motality experience of these workers. The most recent of these included observations through 1983

by worked and estimated cumulative exposure to respirable dust. Of particular interest were lung cancer and non-mulignant respiratory disease (NMRD) montality patterns.

MATERIALS AND METHODS

*Author to whom correspondence aboutd be addressed. Tel/fac: +81-298-53-2627;e-maik honda@taika.teakuba.ac.jp

Subjects were while men who worked for at least 1 day at the plant from the start of its operations in 1948 through to the end of 1989, whose vital status was

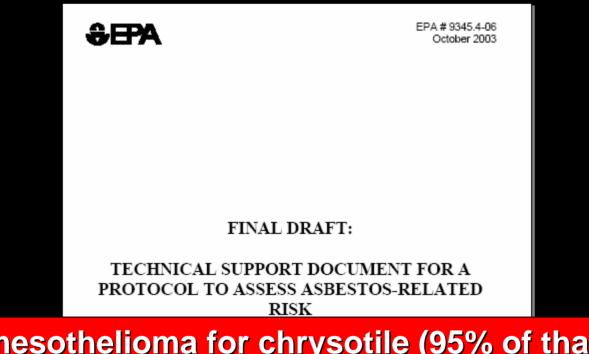
What is RT Vanderbilt hiding?

			Ass. 00 6	cap. Hyg., Vol. 45, No. 7, pp. 5 5 2002 Evide Occupation I R Publiched by Ocford U DOI: 11.1083/a	575-582, 2012 Igjinar Society Iz Anatoly Panat ming a Sine(775		
NO. 04-CI-00274	ANDERSON CIRCUIT C	COURT	Mini		IN THE (THIRD JU	CIRCUIT COURT JDICIAL CIRCUIT COUNTY, ILLINOIS	
IN RE: ASBESTOS PERSONAL INJUR	Y LITIGATION		VIIII			COUNTY, ILLINOIS	
JOHNNY FRANKLIN, INDIVIDUALLY, A ADMINISTRATOR OF THE ESTATE OF I	ND AS FLORA FRANKLIN PLAIN	TIFFS	ЗЕТН ТТНЕ	ANTOGNOL	GOLDENBERG HELLER I ROWLAND SHORT & ASBESTOS CASES,)	
v. GENERAL MOTORS CORP, ET AL.	DEFEND	DANTS	port Sci		Plaintiffs,)	
	ORDER		, Univer , USA; ¹ sam Sols	vs.))	
The Court held a hearing on March 29	9, 2007 on Plaintiff's Motion for an Order			R. T. VANDE	ERBILT COMPANY, INC.,	ý l	
Requesting Sanctions, or in the Alternative, I	,				Defendant.)	
Vanderbilt, Inc. Plaintiff was represented by	Joseph D. Satterley. R.T. Vanderbilt was		at a ta			DENFORCE THE COURT ORDER	
represented by H. Lane Young and Eric Ludw	rig. Having considered the record, arguments	of	ven 194 rtality d			CTION OF CERTAIN DOCUMENTS R. T. VANDERBILT COMPANY, INC.	
counsel, and the Court being otherwise suffic	iently advised;		t subject oth rates es combi				
IT IS HEREBY ORDERED that the s	anctions against the Defendant, R.T. Vanderbi	ilt is	dence in t = 232. (Come	now Plaintiffs, by and through	their attorneys, GOLDENBERG HELLER	
hereby denied at the present time. The Court l	heard arguments again regarding the requested	I	I = 147- (-622); n	ANTOGNOL	I ROWLAND SHORT & GOF	RI, P.C., and for their Motion to Compel, state as	
discovery that was subject to hearing on Febru	ary 21, 2007. The Court herein reaffirms it's		ecurred 1 = 113-	follows:			
rulings from the hearing on February 21, 2007	1.		osed emp yees wit	1.	That on January 26, 2007, Pla	aintiffs' propounded discovery upon Defendant R. T.	
IT IS FURTHERED ORDERED that !	R.T. Vanderbilt shall fully and completely ans	wer	3.3) for 1	Vanderbilt Co	mpany. Inc. recording certain i	issues, specifically as they relate to the production of	F
Plaintiff's Interrogatories 4, 10 and 14 within	fifteen (15) days of the date of the hearing.		responsit evaled ra			issues, specifically as andy relate to the production of	J
IT IS FURTHER ORDERED that R.T.	Vanderbilt must investigate the total amount	of		workers' comj	pensation records.		
money it spent to classify it's talc as non-asbes	stos containing tale, including obtaining docus	ments		2.	That on April 12, 2007, Plain	tiffs sent a letter to Defendant pursuant to Supreme	
from the experts involved and shall obtain cop	ics of all documents from their employees rel	ating	. 1990).	Court Rule 20	l(k) in an effort to resolve a di	iscovery dispute regarding said Request for	
to this matter. Furthermore, R. T. Vanderbilt n	nust obtain from their insurance companies, al	11	ugh 198 up of w	Production.			
documents responsive to Interrogatory No. 4. I	R.T. Vanderbilt shall likewise obtain all of the	* 뛅 년	is of wo	3.	That on March 8, 2007, Plaint	tiffs filed a Motion to Compel the production of the	
documentation it has regarding monies paid to	Dr. Arthur Langer for any and all work and	cincur count cent, clenk dens, clenk	varticular	about referen	ced documents.		
produce those documents to Plaintiff's counsel	within twenty (20) days, R.T. Vanderbilt's	CERCUT GERS, C CTD	respirat				
counsel advised the Court that they would volu	intarily answer Interrogatory No. 14, fully and		TERIAL	4.	That on March 16, 2007, Plain	ntiffs argued the Motion to Compel and an Order	
	1	ANDERSON C JAN D. ROO ENTERED: ⁴	re white			IARSG Asbestos Cases Page 1 of 4	
		BY, BY,	t from the end of				

Graham Gibbs

- Taconite and Talc studies show no increased risk of mesothelioma
 - Talc data is being hidden
 - Taconite data is old 52 mesos?

Solution:



Risk of mesothelioma for chrysotile (95% of that used in U.S.) asbestos exceptionally low and may be zero ...

Prepared for:

Office of Solid Waste and Emergency Response U.S. Environmental Protection Agency Washington, DC 20460

Who are Berman & Crump?

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Risk Assessment & Risk Management

avoiding costly and unsecessarily stringent controls on cl

unmatched depth of experience in applying these skills to

We make it a practice to gain a full understanding of a client specific regulatory or legal context in which it has arisen, a

assessment achieves a realistic definition of the health and

After evaluating the risks in the context of prevailing regulation

client's business objectives, we develop a risk management

that only necessary and effective management measures a

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We understand

Risk and decisions, whatever the context, are the soundest available guides to the tools of risk ensuring adequate human health and environmental protection and, how the tools of risk

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applied to ensure a

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for businesses.

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Related Information

Publications

posed.

Growing confidence in the redevelopment of Brownfield land

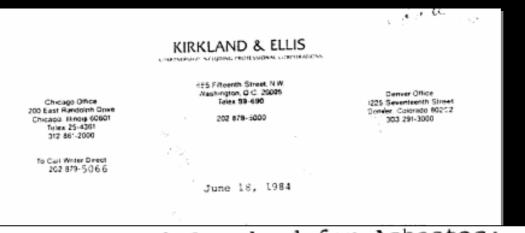
A risky business or setting the standard?

Kenny Crump created the methodology for the AIA/NA to influence OSHA

	Asbestos Information Associ	ation /hi			101
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	Mr. William S. Sneath		H. L. 5139	ă	
	President		D. E. Carty		
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	New York, New York 10017		M. K. West	ă	-
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	Dear Mr. Sneath:		F##		

Attached for your information is a copy of a presentation made by Matthew M. Swetonic, Executive Secretary of the AIA/NA, to the Asbestos Textile Institute in June. Entitled "Why Asbestos?" the speech outlines the growth of the asbestoshealth problem as a national issue, the philosophy of the nation's press with regard to asbestos, and the efforts being made by the AIA/NA to deal with the problem on the medical, legal, governmental, customer and public relations fronts.

Copies for distribu	tion to others within your company.
Sincerely, John H. Marsh President CC: William C. Thu	PLAINTIFF'S EXHIBIT WV-08296 A 19575
	5 C. T



Re: Proposed Standard for Asbestos; OSHA Docket H-033

Dear Mr. Hall:

On behalf of the Asbestos Information Association/North America, enclosed are the original and three topies of Volumes 5 and 6 of AIA/NA's advance written testimony and documentary evidence. These volumes supplement our initial

	supplemental volumes will be delivered to the ther major parties in this proceeding with whom we hav provided testimony, including OSHA staff, to uilding Construction Trades Department and Industric anon Depart- ment, AFL-CIO, as well as various industry points and other groups.
	This supplemental submission contemplates the presen- tation of four additional witnesses. We foresee no diffi- culty in presenting chese witnesses during Cul. 6, 9 and 10. as provided in the Tentative Schedule of Appearances released by OSHA last week, unless extensive cross-examination is planned by OSHA or other parties. We intend to present the majority of our witnesses in panels in order to keep to the schedule. A preliminary schedule for ATA/NA's presentation is attached.
-	

PRESENTATION OF WITNESSES BY THE ASBESTOS INFORMATION ASSOCIATION/NORTH AMERICA

Ontario Neseaic, Sheridan Park

and

Marcel Cossette, Ph.D. Director Recherche Technologique Societe Nationale de L'Amiante

Gordon M. Bragg, Ph.D. Proféssor

July 9, 1984

Kenny Sherman Crump, Ph.D. Science Research Systems, Inc.

In our original concept, the Association would limit its activities to providing accurate, unbiased information on asbestos and health to the press, to the public and to interested politicians and other government officials. It must be remembered

Fortunately --- and properly --- the Association has had the wisdom to alter its original limited concept of its proper functions, and now endeavors to assume whatever activities and responsibilities it deems necessary to protect the interests of the asbestos manufacturing industry in the United States vis-a-vis asbestos-health.

> These are: Medical Affairs Legal Affairs Environmental Control Customer Relations Employee Relations, Inter-industry Relations Publicity and Public Relations Government Affairs A1953C

- 5 -

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

Response to the November 2005 National Stone, Sand & Gravel Association

This document constitutes the United States Environmental Protection Agency Region 9 (EPA Region 9) response to the major findings and conclusions of the National Stone, Sand & Gravel Association report "Evaluation of EPA's Analytical Data from the El Dorado Hills Asbestos Evaluation Project" prepared by the R. J. Lee Group (R. J. Lee Report). A more detailed analysis will be completed after additional information is received from the R. J. Lee Group and the National Stone, Sand & Gravel Association,¹ and the United States Geological Survey (USGS).

The R. J. Lee Report draws conclusions that are contradicted by the El Dorado Hills data and by generally accepted scientific principles for measuring asbestos exposure.



R.J. Lee Finding #5: "Applying the Latest Science and Definitional Techniques, the El Dorado Hills Study Shows no Significant Exposure to the Type of Amphibole Asbestos Fiber Connected To Health Risk."

The R. J. Lee Report claims that the latest science for measuring the risk posed by asbestos is the Berman-Crump Asbestos Risk Assessment Protocol ("Berman-Crump") which proposes that amphibole asbestos fibers which are more than 10 microns long and less than 0.5 microns wide (protocol fibers) are the most toxic. Of the 2,386 fibers which the R. J. Lee Report states the EPA laboratory identified, the R.J. Lee Report concludes that only 7 fibers meet the "Berman-Crump" definition. Therefore, the R.J. Lee Group maintains that EPA has overstated the risk from exposure to asbestos fibers in El Dorado Hills.

EPA Response

The "Berman-Crump" protocol that the R.J. Lee Report references is in fact a draft EPA method. EPA had the method reviewed by a peer consultation panel in 2003. The panel made a number of important recommendations that must be addressed before the method can be used for EPA risk assessments. A number of important revisions have been made to the draft method since 2003, but at this time the method has not been independently peer reviewed. It will not be adopted by EPA as a risk assessment tool unless and until it passes rigorous internal and external peer review.

End