

From: REFREGIER, Michele (RTM)
Sent: Thursday, January 31, 2008 7:36 AM
To: Zazenski, Rich (RTM); Argust, Peter (RTM); Pier, Julie (RTM); Hunter, Greg (RTM)
Cc: Turner, Eric (RTM); BIZA, Peter (RTM)
Subject: RE: article in IM - asbestos

Dear All,

I agree with Rich's position.

In 1989 during the Paris Phyllosilicates conference, I met Slim Thompson from Vanderbilt company who explained me that their workers demonstrated pleural plaques. Pleural plaques are recognised as asbestos exposure related signs by the medical community. Furthermore, there was a publication some time ago relating a high incidence of mesotheliomas in the area of the Vanderbilt mines and more recently at the ERS conference in Stockholm a paper regarding some Vanderbilt workers (no known extra employers) showing asbestos in excess in their lungs.

Then, several labs either in US, in Europe and recently in France found asbestos in Vanderbilt products. Following this, Vanderbilt product was banned from France: precaution principle applies!

I don't like to say tremolitic talc or New York Talc as talc is not the main mineral in this product. The main mineral is tremolite and it seems that the mineral which poses problem is probably anthophyllite (personal communication from labs managers in France and Belgium). It demonstrates the morphological features of asbestos. During OSHA hearing in the nineties all the demonstration regarding cleavage fragments was axed on tremolite cleavage fragments that are not always asbestos!

Finally, what I know is when a "talc" is suspected to contain asbestos it is always a Vanderbilt product.

In 1987 IARC (vol 42) concluded that "talc containing asbestiform fibers" is cancerogenic to humans (Group 1) and all the literature regarding this evaluation was only based on Vanderbilt products and/or workers.

Following the CRAYOLA children's crayons, every talc, New York "talc" as well our talcs, are banned from the formulation of any crayons.

I am not a mineralogist, so I cannot conclude in terms of mineralogy about this very particular "talc". Nevertheless since decades there are several facts showing this "talc" is a dangerous one or very suspect to be one. Some months ago, I read in Industrial Minerals a paper from an asbestos producer in Brazil telling that they extract and grind asbestos in their facilities with all the necessary precautions: but what are the health consequences of their asbestos products among their customers/users of their asbestos? I think we can find in IM good and bad papers. The Kelse's paper continue to maintain suspicion and doubt about all talc industry.

As a consequence, asbestos or not in Vanderbilt products, in our everyday life we have to demonstrate and certify that our talc products do not contain any asbestos.

Best regards

Dr Michèle Réfrégier
Chief Medical Officer
Rio Tinto Minerals - Toulouse

De : Zazenski, Rich (RTM)
Envoyé : 30 January 2008 06:09
À : Argust, Peter (RTM); Pier, Julie (RTM); Hunter, Greg (RTM)

Cc : REFREGIER, Michele (RTM); Turner, Eric (RTM); BIZA, Peter (RTM)
Objet : RE: article in IM - asbestos

I had seen and read this article and my first reaction was, "Who really wrote this paper for John's signature?" I know John and he is a fairly technical person..... but excuse me, he would not write such an article and cite 129 references. The answer is obvious. Regardless;

I cannot agree with the position. We just don't have enough facts. Geologically, it doesn't make sense to me that you can have a mineral deposit that just contains "non-asbestiform" tremolite. I believe the USGS study of talc from Death Valley, California, nailed it correctly that if a deposit contains "non-asbestiform" tremolite, there is also asbestiform tremolite naturally present as well. And since tremolite was never really a large commercial mineral such as chrysotile or crocidolite, there is not enough medical data to conclude that "blocky" tremolite is simply a nuisance dust. But that has been the story line for Vanderbilt for years and they're sticking to it.

I closely followed the OSHA/Vanderbilt debate during the 1980's and early 1990's. Essentially, OSHA "threw in the towel" rather than expend their limited resources any longer on this issue. Their decision by no means should be interpreted as a vindication of Vanderbilt's arguments.

Back in the late 1970's and 1980's, other talc companies were distancing themselves from any deposit that contained tremolite.....all of course but Vanderbilt. Then they proceeded to poison the well.

Best regards,

Richard Zazenski

Richard Zazenski
Regulatory Affairs Manager
Rio Tinto Minerals
rzazensk@luzenac.com

From: Argust, Peter (RTM)
Sent: Tue 1/29/2008 9:08 PM
To: Zazenski, Rich (RTM); Pier, Julie (RTM); Hunter, Greg (RTM)
Cc: REFREGIER, Michele (RTM); Turner, Eric (RTM); BIZA, Peter (RTM)
Subject: FW: article in IM - asbestos

Rich, Julie, Greg,

Our colleague Miguel Galindo has shared with me the attached article in Industrial Minerals magazine's February 2008 edition.

The subtitle is, "Fifteen years after OSHA ruled that common cleavage fragments ought not to be treated as asbestos, confusion and misinformation persists. *John Kelse* sets out the facts for nonasbestiform amphiboles, reviews recent cases, and warns against unreasoned decision-making"

I can see how it could be helpful as part of the ongoing self-education process for ourselves and our business partners to have something like this as a reference. But I defer to the experts like

yourselves to advise if you feel the article is accurate and helpful or not. Could you give me your professional reactions?

Thanks and kind regards,
Peter

Peter Argust
Director of Regulatory Affairs - Minerals

Rio Tinto
2 Eastbourne Terrace, London, W2 6LG, United Kingdom

T: +44 (0)20 7781 1428 M: +44 (0)7786 736156 F: +44 (0)20 7781 1816
peter.argust@riotinto.com <http://www.riotinto.com>

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From: Galindo, Miguel (RTM)
Sent: 29 January 2008 19:27
To: Argust, Peter (RTM)
Subject: article in IM

fyi, you may have seen it already.

Miguel