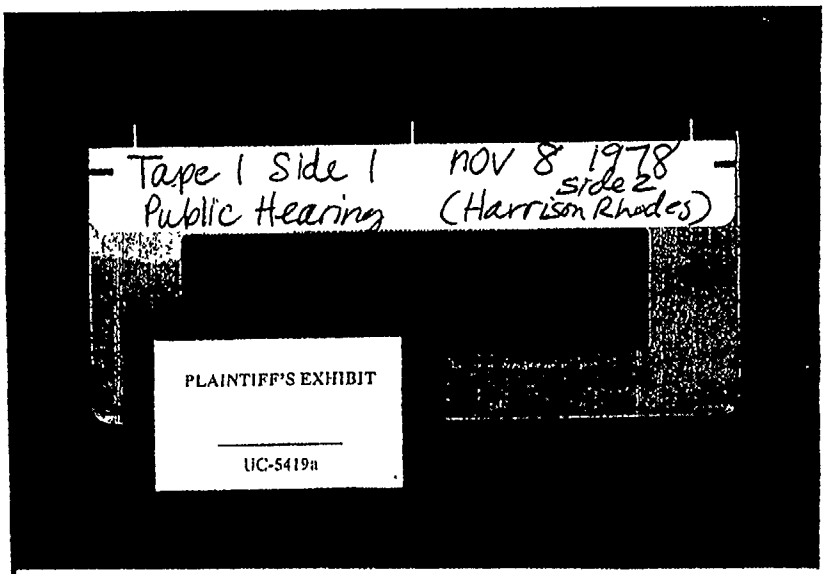

Tape 1 Side 1 NOV 8 1978
Public Hearing side 2
(Harrison Rhodes)
PLAINTIFF'S EXHIBIT
UC-5419a

PLAINTIFF'S EXHIBIT

UC-5419b

Our permanent Chairman, Al Turner, is ill today, and I get the duty. This Public Hearing of the Occupational Safety and Health [inaudible] Board is called to order at this time. I am Gerald O'Hara, the other board members present are Ray Rodriguez, Jerry Martin, Patrick Clancy and Margaret O'Grady. Also present for today's hearing are [inaudible], all the executive officers, John Bulvis, Senior Safety Engineer; Dr. Clint Vanderman, Senior Industrial Hygiene Engineer; and Mark Ashcraft, Staff Services Analyst. Dr. Fred [inaudible], from the Directors' Special Education unit is on loan to the board as a special consultant for today's Public Hearing. If you have not already done so, would those in the audience please sign the attendance roster. This is particularly important due to the unique nature of today's hearing.

// Side 2 //

Identify yourself, get into the microphone. Let's be efficient, go right ahead.

Harrison Rhodes, Union Carbide. I would just like to add the suggestion, the best of my knowledge, Sipulite [spelling?] is one of the group of naturally occurring minerals that [inaudible] is investigating for possible health hazards. John Dement would be a good contact. I would suggest that Dr. Autobany [spelling?] may wish to check with him and see what his - what the status of that work is.

Question: If exceptions for any substance containing asbestos is granted by the board, at what level should the time waited average concentration limits or ceiling concentration limits be set? Is there a comment on that question? Sir.

Harrison Rhodes:

Harrison Rhodes, Union Carbide. I would like to suggest that we already have in the state a set of liable laws for other asbestos-containing materials and the simplest and most direct manner would be to use the same levels that you got for other materials with the statutory exception, I believe that's [inaudible] 1591. So it's a maximum TWA one fiber per cc.

Question: Upon what basis, if any, should products containing encapsulated asbestos fibers be exempt? Come forward.

My name is Harrison Rhodes from Union Carbide and I have some -- basically, some samples and some information that I would like to add to testimony that we have already presented. In a way

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[inaudible] separation of encapsulated - [inaudible] capsulated products and roofing products is in part correct and is in part an overlap because the roofing products are also encapsulated and [inaudible] and many of the properties in question apply to both.

What I would like to do first of all is present you with some samples that illustrates some of the products. First of all to start off, is a frame of reference. I would like to show you the insulation material which was the principal target of the original [inaudible] legislation in 1974. This is it [inaudible]. This is in a jar. It has 25% asbestos, 60% mineral oil and 15% [inaudible] in that plaster [inaudible]. This material after you spray it on, looks something like this [inaudible]. And the thing that's distinctive about it, you can take that and you can crumble it up in your hand and you get a powdery substance. It releases free asbestos fiber very freely. And according to the Federal EPA definition, it's what they call a friable material. No one has any objections to banning this particular material. It was banned by Federal EPA in 1973 as a matter of fact on heating and insulation materials and it's been further banned several months ago for decorative coatings. Now, in contrast to that friable material, all of the products that we are asking for exemptions here are products which have to perform a protective or a structural function and this function is defeated if they have this kind of friable characteristics. First example I wanted to show is a laminated resin. I have here on most of these both the material before it's sprayed and an example of the [inaudible] coating so you can see what they both look like. This is a polyester resin containing about three-quarters of a percent asbestos to get [inaudible] properties that you heard about. It sprays well and when you get it on a vertical surface, it stays and doesn't run off. That resin is used generally with fiberglas to build up a series of layers to give you a rock-proof solid, [inaudible] proof structure. It's widely used in manufactured boats, for example, low maintenance boats. What I got here is just one layer of the structure. This is built up a quarter-inch, half-an-inch to give you the structural strength that you need to keep the boat in shape. Next item I have is a maintenance coating. These coatings are used on all sorts of metal, concrete or block coatings for foundations to protect against weather, protect against corrosion - that sort of thing. This particular one, the bottom coating seems about 2% asbestos and the top coating, the finish coating is a [inaudible] without any. You can see that those are rigid, tough and they will not, in that condition, give off any measurable amount of fibers. Now, I like to add another item here. In many places they insulate

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with fiberglas and [inaudible] surface or [inaudible] insulation. And this doesn't receive any traffic but it has to be covered up so that the water does not wet it down, mat it down and it loses it's insulation properties. And as a variety of masses which are sprayed and these run around four or five percent - what they do is just spray this on a [inaudible] and it protects it from [inaudible]. And the last thing that I want to - sample that I want to show may infringe a little on the roof coating, but I would appreciate it if you just let me get them in your hands. We have a gentleman here, Mr. Paul Beamer, from W.W. Henry who has a much wider range of grouping materials and he will demonstrate those to you when we get into that area. This is a [inaudible] cutback asphalt, finish roofing [inaudible] about eight or nine percent asbestos -

Unknown Speaker: 6.9.

Harrison Rhodes: 6.9. Oh, here we are - this is the [inaudible] about 8.9% asbestos, and the thing you notice is though the roofing, the [inaudible], are resiliant and will move back and forth a little bit, and they must be formulated that way to prevent from cracking with temperature changes. I'll give you a moment to look at those and I want to discuss the spraying test. We can leave these with you. If you're interested in looking in more detail.

Unknown Speaker: Thank you.

Unknown Speaker #2: Yeah, but they won't fit in our file cabinets.

Harrison Rhodes: In our written testimony which I will not attempt to reiterate today, we covered a number of products, the abrasion, and the spraying and a variety of dust count results - there was one study which was quite relevant which I just plain missed when I put it together -- was done by a consulting firm for the H.B. Ford Company, and they used it in their testimony at the Federal EPA. And they were spraying a variety of mastics [inaudible] just ending up over here - the soft coatings on insulation - and their coatings contain - the series that they tested contained 1.8 - 13% chrysotile and they had one coating that also in addition to about 14% chrysotile had 35% of asbestine fiber No. 2 talc. And I don't want to get into an argument over whether that's asbestos or not, generally it's not considered to be. But it does contain a fair amount of particular that if it becomes airborne in the optical counting method, unless you take special - make special provisions which this consultant did not, will appear as an asbestos count. In

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other words, if it becomes airborne, it will show. Now, I gave Mr. Renaldi a copy of that testimony and a figure. I don't know whether you received it or not, John. Would you give each one of a - what I done is plopped the data in a form of a figure that it shows a little better. This is in the same form as the related data that we presented in the written testimony. The airborne concentrations and fibers for cc [inaudible]. I've indicated the current liable ceiling exposure, limited ten - times rated average, eight hour times rated average of two and the maximum set by SP1591 over 1. This is a very poor way to draw draft with everything down at the bottom but I wanted to get on the reference levels. We've ranged the mastics in order of increasing mineral content across to the right. And part of this spraying was done to simulate the worse possible condition in a 20 x 20 foot closed room. These materials normally are not used indoors or outdoors, insulation weather proofing. And they also ran outdoors. You can see the heavy dark circles are personal samples taken in the worker's breathing zone and those all run from fairly detectible to a couple of tenths fiber per cc. The bars -- the top of the bar - the bars are area samples, basically, taken in the immediate vicinity of the spraying. The top of the bar represents the maximum number found, the bottom the lowest and where there [inaudible] average [inaudible] the middle line is the average. The biggest number they found was .5 fiber per cc in a closed room and everything else is in the one and two tenths level. In addition, the [inaudible] which contained 6., 6.2 percent - the [inaudible] company sprayed forty thousand gallons of that to cover their [inaudible]. storage tanks insulation in Modesto and collected their samples. And they weren't able to find any fibers at all out of that particular task, and there's a letter testifying to that in testimony. The important thing to note on the date that we have here and on the other date that we showed is that the fiber concentrations are all very low and you don't really have any clearly defining [inaudible] with mineral content. All the way up to that at 48.6. What it really indicates is that as long as the asbestos is thoroughly wetted and encapsulated, that the fiber release is very, very low. If - in order for these products to be useful, the fibers must be wetted and encapsulated. They start to crumble in use, the producers are in trouble. To conclude products which we are concerned, we believe perform a useful and [inaudible] for industry, the general public. They contained wetted and capsulated fibers which do not expose workers to levels in [inaudible] established by the current OSHA standards or by the SP1591, 1 fiber per cc. We would not be here today, if we were not convinced that these products could be safely within the confines of existing regulations. We request that you continue the use of these

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products in the manner suggested by our written testimony at the 1 fiber per cc TWA level. Thank you very much. I would be glad to answer question and I don't know whether you want to see the roofing samples now as part of this or I wait until you get into the next one.

Unknown Speaker:

I think we'll go on to the next question, Mr. Rhodes. Is there any questions from the board.

Unknown Speaker #2: I have a question of page 8 of his report.

Harrison Rhodes: Which? The written testimony?

Unknown Speaker #2: Yes. In your summary you have one column entitled Number of Locations Tested and you three in the first one and then you have Number of Samples Collected immediately adjacent to that. The locations are these different jobs?

Harrison Rhodes: Different jobs, yes.

Unknown Speaker #2: Okay. In some places you might have done two tests and in one - in others you did just one.

Harrison Rhodes: Collected more than one sample.

Unknown Speaker #2: All right.

Harrison Rhodes: Most places we collected more than one sample.

Unknown Speaker #2: And what do you mean by the arithmetic average in the other column?

Harrison Rhodes: The problem that you get into in both the - particularly in the spraying - is it's a very rapid operation, and it's hard to get a spraying job to last more than an hour or few minutes [inaudible]. So rather than calculate a TWA based on the exposure, if you calculate a - you have some exposure during the spraying and calculate the rest of the day when a man is not working with asbestos is below the protection limit. You get some very low numbers and we thought it was more appropriate to average up the exposures during the actual operation and illustrate those levels rather than combine those with a bunch of zeros to put some fictitious - misleading wrong numbers in. [inaudible] is averaging the actual concentration during the actual operation. Those are not TWAs in most cases.

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Unknown Speaker #2: So you - what you did was you took the value in as fibers per cc and divided by five in that first row?

Harrison Rhodes: No, no, no. What I did I added up - I averaged - I got five different samples, I added the fibers per cc - total fibers per cc and I divided by five.

Unknown Speaker #3: Mr. Rhodes, you've made comments as to spraying application, but what would be the exposure of where you're sandblasting - you know, demolition work of these products v gather comments from Dr. Hecock relative to this where the level of exposure might be very high for the same product when you sandblast or [inaudible] I guess. Demolish something

//End of Tape//

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