

1 was incorporated into products like Mr. Ignatowski
 2 talked to you about, pipecovering and blocks and also
 3 spray products and joint compounds which are some of
 4 the products that the plasterers, like Mr.
 5 Vandergucht, used in their trade.

6 Probably the most amazing thing about
 7 asbestos was its ability to withstand tremendous heat.
 8 So asbestos got mined, and it got milled.

9 And what the milling process is is, once you
 10 take the rock out, there are fibers in it. And you
 11 crush the stone and remove the fibers from it so that
 12 you can use the fiber part of it in products. And
 13 they incorporated it into products.

14 A handful of doctors back in the '30s and
 15 even before started to ask what I am going to refer to
 16 as the first question. That is going to be, were
 17 miners and millers sick because of their exposure to
 18 asbestos or, more specifically, did asbestos cause the
 19 fibrosis or scarring process in the lung that you
 20 heard about this morning.

21 Now, that scarring caused restriction in the

1 lung. It made it more difficult for people to
 2 breathe, and you could see that on X-ray. You could
 3 see the scarring. And that is really the first issue
 4 that was examined.

5 By the 1930s, it is true that the answer to
 6 that question was yes. Massive, high exposures to
 7 pure raw asbestos caused people to get sick, to get
 8 the disease asbestosis. That much of it is true.

9 But the story doesn't end there.

10 The second question is asked, and that
 11 question is, is it possible to use asbestos safely?

12 The reason people asked this question is
 13 because people considered asbestos to be a valuable
 14 mineral, something that was used in products because
 15 of the high tremendous heat that it was applied to.

16 It was around this time, the time this
 17 question was asked, that the United States Public
 18 Health Service, which is an agency of the Federal
 19 Government, began to do studies and provide training
 20 for certain state boards of health and other local
 21 governments.

1 Mr. McGowan talked about this briefly, but,
 2 in 1938, a gentleman by the name of Dreessen did a
 3 study at asbestos textile mills, and he addressed the
 4 second question or, really, what concentration of
 5 asbestos dust can be tolerated without any injury to
 6 your health.

7 To answer this question, Dr. Dreessen went
 8 to asbestos textile mills, and he measured the dust
 9 with the best process that they had available then,
 10 midget impingers and other items that they used to
 11 find out what dose of asbestos people were exposed
 12 to.

13 And the second thing that they did was, they
 14 examined the X-rays of the workers and looked for the
 15 presence or absence of disease in those workers.

16 Did anybody in these textile mills get
 17 sick? Well, yes, they did. Some of these people had
 18 asbestosis.

19 When the researchers matched up the amount
 20 of exposure people had with the disease, they reached
 21 an interesting conclusion.

1 They concluded that the disease was directly
 2 related to the dose, and they published this in Public
 3 Health Bulletin Number 241. It was a publication of
 4 the Government and was available to everyone.

5 So what they did was, they recommended a
 6 threshold level, and they said, if you keep the dust
 7 below this threshold level, you are probably not going
 8 to see new cases of asbestosis, because there was
 9 virtually no asbestosis in those people who did not
 10 have high exposures.

11 This number was mentioned to you a little
 12 bit this morning. It is five million particles per
 13 cubic foot of air.

14 So the answer to the second question was,
 15 yes, we do believe that asbestos can be used safely,
 16 so long as the dust levels are kept under control.

17 Now, this concept of a TLV or a safe dose
 18 was not revolutionary. And it didn't apply only to
 19 asbestos. Really, it applies to your everyday life.

20 If one of you goes home tonight, and you
 21 have a headache because you have had to listen to