

1 Q. Explain that to me your last
2 statement between chrysotile and crocidolite?

3 A. What they say here is that there
4 is evidence that crocidolite is most frequently
5 associated with mesothelioma. From the date
6 available, it appears that the TLV of 5 million
7 particles per cubic foot MPPCF may not be low
8 enough to protect against mesothelioma.
9 Research on the problem continues. That's the
10 additional paragraph. Because Calidria is
11 chrysotile and not crocidolite. That is the
12 distinction that makes a difference to Union
13 Carbide.

14 Q. Wouldn't you say that Union
15 Carbide is telling the reader of that
16 toxicology report that crocidolite causes
17 mesothelioma and chrysotile does not?

18 A. No. Otherwise, I wouldn't say
19 that research is continuing. It's a question
20 of magnitude. They were uncertain at that
21 time. It appears that more is associated with
22 one than the other. It doesn't say zero is
23 associated with it, does it? Nobody was in a
24 position to say that then.

25 Q. Do they say in that report that

1 it's an inference that you can defend. It is
2 not what they say. It doesn't exclude the
3 possibility that crocidolite is more associated
4 in an area of great uncertainty, that's the
5 area that they're claiming is the case.

6 Someone could who had a
7 presumption about this might say gee, why
8 didn't they mention in another sentence this
9 does not rule out that chrysotile is also
10 associated, but the structure of that sentence
11 which is about more frequently suggest less
12 frequently. Otherwise you wouldn't use more.

13 Q. At the time they wrote this in
14 1969, Union Carbide knew that mesothelioma was
15 a fatal disease, didn't they?

16 A. Oh, yes, they did.

17 Q. They knew that even the slightest
18 exposure could cause mesothelioma; is that
19 right?

20 A. There was much more uncertainty
21 about mesothelioma at that period of time than
22 there was about asbestosis or lung cancer. It
23 was, I think more mysterious about what
24 exposure would produce the effect. That is
25 what is referred to here is not clear what the

1 chrysotile causes mesothelioma?

2 A. They don't say either. They say
3 is most frequently associated. They use
4 asbestos exposure in the first sentence. Then
5 they distinguished two kinds of asbestos. It's
6 more associated with the second kind.

7 Then they say this general level
8 of protection, the 5 million particles per
9 cubic foot, may not be low enough to protect
10 against mesothelioma which seems to me to be a
11 candid statement at that period of time.
12 Consistent with disputes going on then that I
13 found in the public literature about what was a
14 level of general restraint on asbestos,
15 whatever type it was, that would protect
16 against mesothelioma.

17 Q. Would you agree with me that it
18 is not a strained interpretation of that that a
19 reader could come to the conclusion from
20 reading that that Union Carbide is saying
21 crocidolite does not cause mesothelioma, but
22 rather chrysotile causes mesothelioma?

23 A. I think someone could come to
24 that conclusion, but I don't think it would be
25 an accurate conclusion. That is, I don't think

1 level of exposure control that would work.

2 Q. But the presumption was a lower
3 exposure to asbestos could cause mesothelioma
4 lower than the exposures needed to cause
5 asbestosis; isn't that correct?

6 A. That's the suggestion, yes.

7 Q. So at the time Union Carbide
8 wrote this 1969 toxicology report, see if you
9 agree with me, they knew one, mesothelioma was
10 a terminal disease, incurable, they knew, two,
11 that mesothelioma was likely caused by lower
12 exposures than necessary to cause asbestosis
13 and lung cancer. Do you agree with those two
14 statements?

15 A. I agree with the first one. I
16 don't know that I would put it the way you did.
17 They certainly thought mesothelioma was a more
18 virile and horrible form of cancer and was less
19 certain about what threshold value would in
20 fact protect against it. So that I would agree
21 with.

22 Q. And nowhere in that toxicology
23 report does it say chrysotile asbestos can
24 cause mesothelioma? It's a simple question.
25 Does it say that?