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SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

JACK L. SCHWARTZ, et al.,)
)
 Plaintiffs,)
)
 vs.)
)
 UNION CARBIDE CORPORATION,)
 etc., et al.,)
)
 Defendants.)

No. C 465 912

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OCT 14 1986

GREENE, O'NEIL
DUNNLEY et al

DEPOSITION OF: ALLEN MORGAN HARVEY
TAKEN ON: OCTOBER 9TH, 1986
VOLUME I: Pages 1 through 227

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November 21, 1986

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GREENE, O'REILLY
BROILLET, et al.

Re: Schwartz v. Union Carbide, et al.
Our File No. H0001-140-JFB

Gentlemen:

Please be advised that deponent, Allan Morgan Harvey, has made the following corrections to his deposition testimony, Volume I, taken on October 9, 1986:

<u>Page</u>	<u>Line</u>	<u>Corrections</u>
15	2	Delete the word "root" and insert the word "route".
46	3	Delete the words "all---all".
46	4	Delete the word "don't".
56	4	After the words "That was", insert the word "not".
81	11, 17 and 25	Delete the name "Irving" and insert the name "Erdman".

*file on
dgo*

Schwartz v. Union Carbide
November 21, 1986
Page 2.

<u>Page</u>	<u>Line</u>	<u>Corrections</u>
89	9	Delete the name "Irving" and insert the name "Erdman".
219	24	Delete the word "unfortunately" and insert the word "fortunately".

The original deposition transcript was executed by Mr. Harvey on November 12, 1986.

Very truly yours,

SCHELL & DELAMER

By *Joseph F. Bender*
JOSEPH F. BENDER

J.F.B.

JFB:pk

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DEPOSITION OF ALLAN MORGAN HARVEY, TAKEN AT
816 S. FIGUEROA STREET, LOS ANGELES, CALIFORNIA,
COMMENCING AT 10:15 A.M., ON THURSDAY, OCTOBER 9TH,
1986, BEFORE PATRICIA W. YARNELL, CSR NO. 2019,
REGISTERED PROFESSIONAL REPORTER, A NOTARY
PUBLIC IN AND FOR THE STATE OF CALIFORNIA,
PURSUANT TO NOTICE.

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I N D E X

WITNESS: EXAMINATION

ALLAN MORGAN HARVEY

(BY MS. EISENSTEIN)

5

E X H I B I T S

PLAINTIFFS' DESCRIPTION IDENTIFIED

1 REVIEW OF OCCUPATIONAL MORBIDITY 131

AND MORTALITY AT THE GOUVERNEUR TALC CO.

2 A MORBIDITY STUDY OF EMPLOYEES 131

AT GOUVERNEUR TALC COMPANY

3 AN EVALUATION OF LUNG CANCER MORTALITY 132

AMONG EMPLOYEES OF THE GOUVERNEUR TALC COMPANY

4 LETTER OF 12-18-80 FROM 147

DR. ROBERT MURRAY TO MR. HARVEY

5 LETTER OF 11-4-76, ENTITLED 164

"REPORT OF CALL AT SYRACUSE"

6 LETTER OF 9-27-77 FROM 180

DR. TABERSHAW TO MR. ESTERGUARD

7 PRESENTATION BY THE R.T. VANDERBILT 191

COMPANY, INC. TO ASSISTANT SECRETARY

OF LABOR, MR. JOHN STENDER, INDUSTRIAL

TALC - JUNE 19, 1975, WASHINGTON, D.C.

8 MINERAL SAFETY DATA SHEET OF 2-1-83 221

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ALLAN MORGAN HARVEY,

CALLED AS A WITNESS, HAVING BEEN
SWORN, WAS EXAMINED AND TESTIFIED
AS FOLLOWS:

EXAMINATION

BY MS. EISENSTEIN:

Q. SIR, WOULD YOU PLEASE STATE YOUR FULL NAME
FOR THE RECORD.

A. ALLEN MORGAN HARVEY.

Q. AND YOUR PRESENT ADDRESS?

A. 39 CEDAR ROAD, WILTON, CONNECTICUT.

Q. IS THAT YOUR RESIDENCE, SIR?

A. YES.

Q. OKAY. DO YOU HAVE ANY INTENTION OF MOVING
IN THE NEAR FUTURE?

A. NO.

Q. OKAY. SIR, HAVE YOU EVER HAD YOUR
DEPOSITION TAKEN BEFORE?

A. YES, I HAVE.

Q. ON HOW MANY OCCASIONS?

MR. BENDER: IS THAT RELEVANT?

MS. EISENSTEIN: YES.

1 THE WITNESS: ABOUT FIVE TIMES.

2 BY MS. EISENSTEIN:

3 Q. WHEN WAS THE FIRST TIME YOU HAD YOUR
4 DEPOSITION TAKEN?

5 A. ABOUT EIGHT YEARS AGO.

6 Q. OKAY. AND WHEN WAS THE LAST TIME?

7 A. ABOUT FIVE MONTHS AGO.

8 Q. OKAY. AM I CORRECT IN ASSUMING THEN THAT
9 YOU UNDERSTAND THE DEPOSITION PROCEDURES?

10 A. YES.

11 Q. OKAY. YOU UNDERSTAND THAT YOU HAVE BEEN
12 SWORN IN AS IF YOU WERE IN A COURT OF LAW?

13 A. YES.

14 Q. AND THAT THERE IS A PENALTY OF PERJURY?

15 A. YES.

16 Q. OKAY. PLEASE STOP ME AT ANY TIME IF YOU DO
17 NOT UNDERSTAND A QUESTION; I WILL BE MORE THAN HAPPY TO
18 REPHRASE IT FOR YOU.

19 DO YOU RECALL THE NAME OF THE ATTORNEY THAT
20 TOOK THE DEPOSITION SEVERAL MONTHS AGO?

21 A. NO, I DON'T.

22 Q. WAS IT A PERSONAL INJURY CASE?

23 A. NO.

24 Q. WHAT TYPE OF CASE WAS IT, SIR?

25 MR. RACE: LET'S GO OFF THE RECORD FOR A SECOND.

1 (DISCUSSION ENSUED OFF THE RECORD.)

2 BY MS. EISENSTEIN:

3 Q. SIR, WOULD YOU PLEASE TELL US THE SUBSTANCE
4 OF YOUR TESTIMONY AT THAT TIME.

5 MR. BENDER: OBJECTION ON THE GROUNDS IT'S OVERLY
6 BROAD AND ASKS FOR AN OPINION OR CONCLUSION, BUT PURSUANT
7 TO THE CONVERSATIONS OFF THE RECORD, AND IF IT DOESN'T
8 TAKE TOO LONG OR GO TOO FAR, GO AHEAD.

9 THE WITNESS: I DON'T REALLY REMEMBER WHAT THAT WAS
10 ALL ABOUT.

11 BY MS. EISENSTEIN:

12 Q. SIR, DID YOU REVIEW ANY DOCUMENTS IN
13 PREPARATION FOR THIS DEPOSITION?

14 A. YES.

15 Q. WHAT TYPE OF DOCUMENTS DID YOU REVIEW?

16 A. IT WAS A SERIES OF DOCUMENTS THAT HAD TO DO
17 WITH THE INTERROGATORIES.

18 Q. INTERROGATORIES IN THIS PARTICULAR CASE?

19 A. YES.

20 Q. ANSWERS BY VANDERBILT --

21 A. YES.

22 Q. -- TO THE PLAINTIFF?

23 A. YES.

24 Q. ANY OTHER DOCUMENTS, SIR?

25 A. LET'S SEE. THERE WAS ONE HAVING TO DO WITH

1 SOME MEDICAL RECORDS OF THE -- OF JACKIE SCHWARTZ, AND
2 THAT'S ABOUT ALL I CAN REMEMBER.

3 Q. SO IT WOULD HAVE BEEN, TO YOUR
4 RECOLLECTION, THE INTERROGATORIES TO THE PLAINTIFF AND
5 MEDICAL RECORDS REGARDING THE PLAINTIFF?

6 A. YES.

7 Q. DID YOU REVIEW ANY OTHER DOCUMENTS?

8 A. NO. THAT WAS ABOUT IT.

9 Q. OKAY. I ASSUME -- DID YOU HAVE ANY
10 CONVERSATIONS WITH YOUR COUNSEL REGARDING THIS DEPOSITION
11 TODAY?

12 A. YES.

13 Q. OKAY. SIR, COULD YOU BRIEFLY TELL ME YOUR
14 FORMAL EDUCATIONAL BACKGROUND?

15 A. I RECEIVED A BACHELOR OF SCIENCE FROM THE
16 UNIVERSITY OF GUELPH, IN GUELPH, ONTARIO, SPELLED
17 G-U-E-L-P-H. MASTER OF SCIENCES AND BIOCHEMISTRY FROM
18 MICHIGAN STATE UNIVERSITY.

19 Q. OKAY. AND WHEN DID YOU RECEIVE YOUR B.A.,
20 SIR?

21 A. B.S.

22 Q. B.S.; I'M SORRY.

23 A. 1945.

24 Q. OKAY. AND WHEN DID YOU RECEIVE THE DEGREE
25 IN BIOCHEMISTRY?

1 A. 1947.

2 Q. 1947. DID YOU HAVE ANY FORMAL EDUCATION
3 AFTER THAT TIME?

4 A. NO.

5 Q. WHAT DID YOU DO IN 1947, SIR?

6 A. I WENT TO WORK FOR A CHEMICAL CONCERN.

7 Q. WHAT WAS THE NAME OF THAT CONCERN?

8 A. FOOD MACHINERY AND CHEMICAL CORPORATION.

9 Q. AND WHAT WAS YOUR JOB TITLE WHEN YOU FIRST
10 WENT TO WORK FOR THEM?

11 A. RESEARCH CHEMIST.

12 Q. AND WHAT WERE YOUR JOB RESPONSIBILITIES AS
13 A RESEARCH CHEMIST?

14 A. TO PREPARE RESEARCH CHEMICALS.

15 Q. COULD YOU BE A LITTLE MORE SPECIFIC FOR ME
16 AS TO WHAT YOUR JOB DUTIES WERE?

17 A. TO -- THE JOB INVOLVED THE PREPARATION OF
18 NEW CHEMICALS. THESE WOULD BE CALLED RESEARCH CHEMICALS,
19 BECAUSE THEY ARE NEW. I USUALLY TOOK MY DIRECTION FROM A
20 SENIOR CHEMIST, WHO WANTED THESE CHEMICALS PREPARED, AND
21 MY -- MY EDUCATION ALLOWED ME TO CARRY OUT THAT TASK.

22 Q. AND SO YOU ACTUALLY PREPARED THE NEW
23 CHEMICALS?

24 A. YES.

25 Q. WAS THIS IN A LABORATORY?

1 A. YES.

2 Q. DID YOU HAVE ANY OTHER DUTIES ASIDE FROM
3 PREPARING THESE CHEMICALS IN THE LABORATORY?

4 A. NO.

5 Q. HOW LONG DID YOU REMAIN IN THAT JOB?

6 A. FOUR YEARS.

7 Q. OKAY. SO THAT WOULD HAVE BEEN UNTIL 1951?

8 A. YES.

9 Q. AND WHAT WAS YOUR JOB TITLE IN 1951?

10 A. SAME THING: CHEMIST.

11 Q. WAS IT WITH A DIFFERENT COMPANY?

12 A. NO.

13 Q. OKAY. IT WAS A CHEMIST WITH -- I'M SORRY;
14 I FORGOT THE NAME OF THE COMPANY.

15 A. FOOD MACHINERY AND CHEMICAL CORPORATION.

16 Q. RIGHT. DID YOUR JOB DUTIES CHANGE IN 1951?

17 A. I CHANGED JOBS; I CHANGED EMPLOYERS.

18 Q. OH. YOU CHANGED EMPLOYERS?

19 A. IN 1951.

20 Q. BUT THE COMPANY NAME STAYED THE SAME?

21 A. YES. I LEFT THE COMPANY.

22 Q. OH. YOU LEFT THE COMPANY. OKAY. I WAS
23 CONFUSED.

24 AND WHAT WAS THE NAME OF YOUR NEW EMPLOYER?

25 A. R.T. VANDERBILT COMPANY, INCORPORATED.

1 Q. WHAT WERE YOUR DUTIES AS A CHEMIST WITH
2 R.T. VANDERBILT IN 1951?

3 A. I DIDN'T COME AS A CHEMIST.

4 Q. OKAY. WHAT WAS YOUR FIRST JOB TITLE WITH
5 R.T. VANDERBILT?

6 A. SALES DEVELOPMENT.

7 Q. AND WAS THAT YOUR JOB IN 1951?

8 A. YES.

9 Q. AND WHAT WERE YOUR DUTIES IN SALES
10 DEVELOPMENT?

11 A. MY DUTIES WERE TO ATTEMPT TO DEVELOP THE
12 SALES OF VARIOUS BIOCIDES.

13 Q. AND WHAT ARE BIOCIDES, SIR?

14 A. THEY ARE CHEMICALS THAT ARE USED TO KILL
15 LIVING ORGANISMS. KILL OR CONTROL.

16 Q. WOULD PESTICIDES BE CONSIDERED BIOCIDES?

17 A. YES.

18 Q. THAT TYPE OF THING?

19 A. (WITNESS NODS HEAD.)

20 Q. OKAY. YOU SAY DEVELOPMENT OF SALES. WHAT
21 EXACTLY WERE YOUR DUTIES?

22 A. MY DUTIES WOULD BE TO GO INTO A NEW
23 TERRITORY, OR A TERRITORY WHERE WE WERE -- AT THAT TIME,
24 WE WERE NOT SELLING ANY OF THAT PARTICULAR BIOSIDE, AND
25 TO SEE IF -- TO DETERMINE IF THERE WAS A POTENTIAL FOR

1 SALES IN THAT TERRITORY; AND IF SO, TO ATTEMPT TO DEVELOP
2 A SALE, SO THAT SOMETIME IN THE FUTURE, A REGULAR
3 SALESMAN COULD TAKE OVER.

4 Q. WOULD YOU HAVE CONTACT WITH POTENTIAL
5 CUSTOMERS?

6 A. OH, YES.

7 Q. OKAY. DID YOU HAVE ANY OTHER JOB DUTIES AT
8 THAT TIME?

9 A. NOT IN '51, NO.

10 Q. HOW LONG DID YOU REMAIN IN THAT JOB
11 CAPACITY?

12 A. FOUR YEARS.

13 Q. SO UNTIL 1955?

14 A. THAT'S RIGHT.

15 Q. WHO WAS YOUR SUPERVISOR FROM 1951 TO 1955?

16 A. DR. KENNETH KARSTEN, K-A-R-S-T-E-N.

17 Q. AND WHAT WAS HIS POSITION WITH VANDERBILT?

18 A. HE WAS THE MANAGER OF THE BIOSIDE
19 LABORATORY.

20 Q. OKAY. WHO DID HE REPORT TO; DO YOU KNOW?

21 A. HE REPORTED TO DR. A.A. SUMMERVILLE.

22 Q. AND WHAT WAS HIS -- DR. SUMMERVILLE'S
23 POSITION?

24 A. EXECUTIVE VICE-PRESIDENT.

25 Q. OKAY. IN 1955, YOUR JOB DUTIES CHANGED?

1 A. YES.

2 Q. OKAY. WHAT WAS YOUR JOB IN 1955?

3 A. FROM 1955 ON, FOR SOME TIME, I BECAME A
4 CHEMIST FOR THE R.T. VANDERBILT COMPANY.

5 Q. WHAT WERE YOUR JOB DUTIES AS A CHEMIST?

6 A. THE SAME AS WHEN I WORKED FOR THE FOOD
7 MACHINERY AND CHEMICAL CORPORATION, WHICH WAS TO PREPARE
8 NEW BIOCIDES.

9 Q. DID YOU HAVE ANY OTHER DUTIES WITH
10 VANDERBILT, THAT YOU DID NOT HAVE IN YOUR PREVIOUS JOB AS
11 A CHEMIST?

12 A. AT THAT TIME?

13 Q. YES.

14 A. NO.

15 Q. OKAY. WHEN WERE YOUR DUTIES -- WHEN DID
16 YOUR DUTIES CHANGE OR INCREASE?

17 A. LET'S SEE. APPROXIMATELY 1971, I BECAME
18 THE MANAGER OF THE PATENT DEPARTMENT AT THE R.T.
19 VANDERBILT COMPANY.

20 Q. OKAY. LET ME BACK UP FOR A MINUTE. WHO
21 WAS YOUR SUPERVISOR FROM 1955 TO 1971?

22 A. DR. LESTER BROOKS.

23 Q. OKAY. AND WHAT WAS DR. BROOKS' TITLE?

24 A. LABORATORY DIRECTOR.

25 Q. WAS HE LABORATORY DIRECTOR FROM 1955

1 STRAIGHT THROUGH TO 1971?

2 A. I BELIEVE SO.

3 Q. OKAY. COULD YOU TELL ME WHAT YOUR JOB
4 DUTIES BECAME IN 1971?

5 A. MY DUTIES WERE TO PREPARE ALL THE NECESSARY
6 DATA IN ORDER TO PASS ALONG TO A PATENTS ATTORNEY, THAT
7 WOULD ALLOW ONE OF THE TECHNICAL PEOPLE IN THE VANDERBILT
8 LABORATORY TO APPLY FOR A PATENT.

9 Q. I SEE.

10 A. ASSEMBLE THAT DATA AND PUT IT IN PROPER
11 SHAPE FOR PATENT APPLICATION.

12 Q. SO YOU DID PAPER WORK AT THAT TIME,
13 PREPARING EVERYTHING NECESSARY IN ORDER TO OBTAIN A
14 PATENT?

15 A. THAT'S RIGHT.

16 Q. OKAY. WHAT TYPES OF PATENTS WAS VANDERBILT
17 TRYING TO OBTAIN AT THAT TIME?

18 A. CHEMICAL PATENTS.

19 Q. WHEN YOU SAY, "CHEMICAL PATENTS", SIR,
20 COULD YOU GIVE ME SOME EXAMPLES, PLEASE?

21 A. THERE ARE SEVERAL DIFFERENT TYPES OF
22 PATENTS. THERE ARE COMPOSITION-OF-MATTER PATENTS, WHERE
23 YOU PATENT A CHEMICAL THAT'S BEEN MADE FOR THE VERY FIRST
24 TIME. NEVER BEEN MADE BEFORE, TO ANYONE'S KNOWLEDGE, OR
25 CERTAINLY NOT PATENTED.

1 OR IT COULD BE A PROCESS PATENT, WHERE A
2 KNOWN CHEMICAL IS PREPARED BY A DIFFERENT CHEMICAL ROOT;
3 AND THERE ARE APPLICATION PATENTS, WHERE A KNOWN CHEMICAL
4 THAT HAS BEEN -- FOR WHICH A NEW APPLICATION HAS BEEN
5 FOUND.

6 Q. OKAY. DOES VANDERBILT PRODUCE DIFFERENT
7 TYPES OF INDUSTRIAL TALCS, SIR?

8 A. YES.

9 Q. OKAY. AND EACH DIFFERENT TYPE HAS A
10 PATENT; IS THAT CORRECT?

11 A. NO.

12 Q. NO? THEN --

13 A. WE HAVE NO PATENTS ON OUR TALCS.

14 Q. WHY IS THAT, SIR?

15 A. THEY ARE NOT PATENTABLE.

16 Q. AND WHY ARE THEY NOT PATENTABLE?

17 A. BECAUSE THEY ARE OLD PRODUCTS, FOR WHICH WE
18 DON'T HAVE --

19 Q. SO DID --

20 A. -- NEW METHODS OF PREPARATION, OR NEW
21 APPLICATIONS, OR PATENTABLE OPPORTUNITIES.

22 Q. SO AM I CORRECT THEN THAT NONE OF THE
23 PATENTS YOU WERE APPLYING FOR, OR COLLECTING THE DATA TO
24 APPLY FOR, PERTAINED TO INDUSTRIAL TALC?

25 A. THAT'S RIGHT.

1 Q. WHO WAS YOUR SUPERVISOR DURING THAT TIME?

2 A. I BELIEVE IT WAS DR. KARSTEN, DR. KENNETH
3 KARSTEN, FOR APPROXIMATELY A YEAR OR TWO.

4 Q. AND THEN WHO BECAME YOUR SUPERVISOR?

5 A. AND AFTER THAT, IT WAS MR. BOB -- ROBERT.
6 MR. ROBERT BACON, B-A-C-O-N.

7 Q. AND WHAT WAS HIS TITLE?

8 A. DIRECTOR OF THE LABORATORIES.

9 Q. WHICH HAD BEEN MR. KARSTEN'S TITLE PRIOR TO
10 THAT TIME?

11 A. THAT'S RIGHT.

12 Q. HOW LONG DID YOU REMAIN IN THAT JOB
13 CAPACITY?

14 A. IN THAT TYPE OF WORK, I CONTINUED TO DO
15 THAT TYPE OF WORK FOR ABOUT SEVEN OR EIGHT YEARS. AS THE
16 ACTIVITY DECREASED, I ASSUMED OTHER DUTIES, UNTIL AT ONE
17 POINT, I NO LONGER DID THAT KIND OF WORK; I WOULD SAY
18 SEVEN OR EIGHT YEARS.

19 Q. SO UNTIL APPROXIMATELY 1979? 1978 OR 1979?

20 A. WE WILL SAY 1978. 1978. IT WAS RATHER A
21 PHASE-OUT.

22 Q. OF THE PATENT DEPARTMENT?

23 A. NO, NO. OF MY DUTIES.

24 Q. I SEE. DURING THAT TIME, DID YOU GRADUALLY
25 ASSUME OTHER DUTIES?

1 A. YES, I DID.

2 Q. OKAY. AND THAT WAS OVER A PERIOD OF TIME?

3 A. YES.

4 Q. WHEN DID YOU FIRST ASSUME OTHER DUTIES
5 OTHER THAN COMPILING DATA FOR PATENTS?

6 A. I STARTED ASSUMING DUTIES, ON A SMALL
7 SCALE, MIND YOU, AS I -- AS THE PATENT WORK DECREASED IN
8 APPROXIMATELY 1972.

9 Q. AND WHAT WOULD THOSE DUTIES HAVE BEEN?

10 A. THOSE DUTIES INVOLVED THE COLLECTION OF
11 DATA AND INFORMATION CONCERNING RULES AND REGULATIONS,
12 GOVERNMENT RULES AND REGULATIONS, THAT MIGHT AFFECT THE
13 SALE AND PRODUCTION OF OUR VARIOUS CHEMICALS AND
14 MINERALS, AND DISSEMINATING THAT DATA TO THE CONCERNED
15 MANAGERS WITHIN MY CORPORATION.

16 Q. SPECIFICALLY TO MANAGERS, OR TO INDIVIDUALS
17 THAT WOULD HAVE AN INTEREST WITHIN THE CORPORATION?

18 A. MOSTLY TO MANAGERS.

19 Q. OKAY. WERE THERE MANAGERS AT THAT TIME OF
20 DIFFERENT -- LET ME STRIKE THAT.

21 AT THAT TIME, DID VANDERBILT HAVE DIFFERENT
22 DIVISIONS?

23 A. YES, IT DID.

24 Q. AND DID EACH DIVISION HAVE A MANAGER?

25 A. MORE OR LESS.

1 Q. OKAY. WHAT WERE THE DIFFERENT DIVISIONS AT
2 THAT TIME?

3 A. THERE WAS A DIVISION OF MANUFACTURING AND
4 MINING, A RESEARCH DIVISION, AND VARIOUS SALES DIVISIONS.

5 Q. OKAY. SO YOU WOULD DISSEMINATE INFORMATION
6 REGARDING GOVERNMENT OR ADMINISTRATIVE REGULATIONS TO THE
7 MANAGERS OF THESE THREE DIVISIONS?

8 A. YES.

9 Q. TO ANY OTHER INDIVIDUALS BESIDES THE
10 MANAGERS OF THOSE DIVISIONS?

11 A. SOMETIMES THERE WAS DIRECT -- THERE MIGHT
12 BE DIRECT PASSING OF INFORMATION TO THE HEADS OF VARIOUS
13 SALES GROUPS WITHIN THE SALES DIVISION, DEPENDING UPON
14 THE TYPE OF RULE OR REGULATION, WHETHER IT WAS
15 ALL-ENCOMPASSING OR SPECIFIC.

16 Q. OKAY. WELL, YOU HAVE MENTIONED THREE
17 DIFFERENT DIVISIONS, AND THE THIRD WAS THE SALES
18 DIVISION.

19 MR. BENDER: EXCUSE ME; THAT WAS --

20 MS. EISENSTEIN: RIGHT, RIGHT. THAT'S MY NEXT
21 QUESTION.

22 Q. WAS THERE MORE THAN ONE SALES DIVISION?

23 A. YES. WITHIN THE SALES DIVISION, THERE WERE
24 SALES DEPARTMENTS, LET ME PUT IT THAT WAY. SALES
25 DEPARTMENTS WITHIN THE SALE DIVISION.

1 Q. OKAY. WHO WERE THE MANAGERS THAT YOU WOULD
2 HAVE DISSEMINATED THIS INFORMATION TO, BEGINNING IN 1972?

3 A. IN 1972? THAT WOULD TAKE QUITE A WHILE.
4 LET ME SEE HOW MY MEMORY IS.

5 LET'S START WITH THE PAINT DEPARTMENT. IT
6 WOULD BE -- AND I CAN'T REMEMBER EVERYTHING HERE; IT'S
7 JUST TOO --

8 Q. JUST WHAT YOU REMEMBER, SIR.

9 A. STARTING WITH THE PAINT DEPARTMENT, THERE
10 WOULD BE MR. ROSS, MR. CARLSON.

11 CERAMICS DEPARTMENT, MR. CLARK AND MR.
12 JOHNSON.

13 OIL -- OIL DEPARTMENT, AS YOU CALL IT. OIL
14 DEPARTMENT, IT WOULD BE MR. MARKEY.

15 Q. MARKEY?

16 A. MARKEY, M-A-R-K-E-Y.

17 Q. OKAY.

18 A. RUBBER DEPARTMENT, MR. LAWRENCE AND MR. --
19 I HAVE FORGOTTEN THIS FELLOW'S NAME WHO WAS -- WHO WAS
20 NEXT, AND THE NEXT TWO.

21 LET'S SEE NOW; WHAT HAVE I GOT LEFT? I
22 HAVE GONE TO PAPER AND PAINT -- PAINTS AND PAPER ARE
23 TOGETHER.

24 Q. PAINT AND PAPER ARE PART OF THE SAME
25 DEPARTMENT?

1 A. YES. AND OIL AND CERAMICS AND RUBBER. I
2 THINK I HAVE COVERED THEM ALL.

3 OH. SPECIALTIES. I'M SORRY. SPECIALTIES
4 -- SPECIALTIES IS MR. MC COZLIND (PH.); AND PLASTICS, I
5 CAN'T REMEMBER.

6 I THINK THAT'S COVERING IT, THOUGH.

7 Q. WAS THERE A SEPARATE MINING DIVISION?

8 A. MINING CAME UNDER THE -- WHAT I TOLD YOU
9 WAS THE MANUFACTURING AND MINING. IF YOU LOOK BACK IN
10 THERE, I GAVE YOU A DIVISION OF MANUFACTURING AND MINING.

11 Q. UH-HUH. DID YOU DISSEMINATE INFORMATION TO
12 THE HEAD OF THAT DIVISION?

13 A. YES.

14 Q. WHO WAS THAT?

15 A. TODAY?

16 Q. WHO WAS IT IN 1972?

17 A. 1972?

18 Q. YES.

19 A. I BELIEVE IT WAS MR. MAC LELLAN IN 1972.

20 Q. OKAY.

21 A. IF THERE WERE INDEED SOME INFORMATION TO
22 DISSEMINATE. I CAN'T REMEMBER BACK THAT FAR.

23 Q. SURE.

24 YOU HAD MENTIONED EARLIER THAT YOUR JOB --
25 YOU GRADUALLY OBTAINED DIFFERENT JOB DUTIES. WHAT WAS

1 THE NEXT DUTY THAT YOU OBTAINED AFTER THE ONE YOU HAVE
2 JUST DESCRIBED?

3 A. WELL, THAT DUTY THAT I DESCRIBED, THE
4 COLLECTION AND DISSEMINATION OF DATA, WAS THE ONLY OTHER
5 DUTY THAT I ASSUMED, AND THAT INCREASED IN SCOPE, AND OF
6 COURSE WITHIN THAT WOULD BE SIDE ISSUES, OR LESSER
7 ISSUES, SUCH AS PREPARING MATERIAL -- SUCH AS MATERIAL
8 DATA SAFETY SHEETS, AND I WOULD BE IN CHARGE OF THAT,
9 WHICH IS REALLY A DISSEMINATION OF DATA, IN A WAY, OR
10 HELPING WITH THE REGISTRATION OF CHEMICALS UNDER THE --
11 UNDER A RULE SUCH AS THE TOXIC CONTROL ACT.

12 AND OF COURSE THAT WOULD ALL COME IN UNDER
13 THESE, THE DISSEMINATION AND COLLECTION --
14 COLLECTION-AND-DISSEMINATION-OF-DATA TITLE, THAT I
15 ASSUMED IN GREATER SCOPE AS I DROPPED OFF THE AMOUNT OF
16 WORK THAT I WAS DOING WITH THE PATENTS. THAT WAS ASSUMED
17 BY OTHER PEOPLE.

18 Q. I SEE. WHEN YOU SAY PREPARING MATERIAL
19 DATA SAFETY SHEETS, WHO WERE THOSE DISSEMINATED TO?

20 A. WHOEVER WANTED THEM.

21 Q. WERE THOSE DISSEMINATED WITHIN THE COMPANY
22 OR OUTSIDE THE COMPANY?

23 A. BOTH INSIDE AND OUT.

24 Q. AND IT WAS YOUR JOB TO DISSEMINATE THOSE
25 DATA SHEETS TO BOTH INSIDE AND OUTSIDE THE COMPANY?

1 A. YES.

2 Q. HAVE WE DISCUSSED ALL OF YOUR DUTIES DURING
3 THAT TIME PERIOD WHEN YOU WERE GRADUALLY OBTAINING MORE
4 RESPONSIBILITIES?

5 A. IN ESSENCE, YES.

6 Q. OKAY. SO THIS WOULD HAVE BEEN FROM 1972
7 UNTIL WHEN?

8 A. THE PRESENT.

9 Q. TO THE PRESENT TIME?

10 A. (NO AUDIBLE RESPONSE.)

11 Q. DID YOUR JOB TITLE EVER CHANGE?

12 A. YES.

13 Q. AND WHAT WAS YOUR JOB TITLE AFTER -- WELL,
14 ACTUALLY, YOUR LAST JOB TITLE WAS A CHEMIST, AND --

15 A. WELL, LET'S SEE. AFTER CHEMIST, BECAME
16 HEAD OF THE PATENT DEPARTMENT.

17 Q. I'M SORRY; RIGHT. OKAY.

18 A. I HAVE FORGOTTEN WHAT THE TITLE WAS AT THAT
19 TIME. THEN THERE FOLLOWED A SERIES OF -- OF TITLES THAT
20 -- WHICH WERE MERELY THE RESULT OF SEARCHING FOR A PROPER
21 TITLE, LET ME PUT IT THAT WAY, BECAUSE HERE WAS A NEW
22 DEPARTMENT THAT HAD NEVER BEEN IN EXISTENCE, PER SAY, AND
23 THEN THOSE TITLES WERE MANAGER OF PRODUCT DEVELOPMENT, I
24 THINK WAS ONE. I CAN'T REMEMBER WHAT THE OTHER ONE WAS.
25 AND THEN FINALLY, DIRECTOR OF ENVIRONMENTAL AFFAIRS,

1 WHICH I HAVE NOW.

2 Q. OKAY. WHEN YOU SAID, "NEW DEPARTMENT",
3 WHAT WAS THE FUNCTION OF THIS NEW DEPARTMENT?

4 A. TO -- ESSENTIALLY, WHAT I SAID BEFORE: TO
5 COLLECT AND DISSEMINATE INFORMATION CONCERNING GOVERNMENT
6 REGULATIONS HAVING TO DO WITH THE SALE AND PRODUCTION OF
7 OUR VARIOUS CHEMICALS AND MINERALS.

8 Q. WERE YOU BASICALLY -- WAS YOUR DEPARTMENT
9 BASICALLY THE PLACE AT THE COMPANY WHERE ONE WOULD GO IN
10 ORDER TO FIND INFORMATION REGARDING VANDERBILT'S
11 PRODUCTS?

12 A. BE ONE OF THE PLACES. THERE ARE OTHER --
13 THERE WOULD BE OTHER DEPARTMENTS THAT WOULD HAVE
14 DIFFERENT TYPES OF INFORMATION CONCERNING VANDERBILT
15 PRODUCTS.

16 Q. OKAY. SO THE INFORMATION THAT YOUR
17 DEPARTMENT COLLECTED WAS PRIMARILY REGULATORY DATA?

18 A. HAVING TO DO WITH REGULATIONS, YES.

19 Q. OKAY. ANYTHING ELSE BESIDES THAT?

20 A. NOT TO MY KNOWLEDGE.

21 Q. AND THAT IS THE DEPARTMENT THAT BECAME THE
22 DEPARTMENT OF ENVIRONMENTAL AFFAIRS?

23 A. THAT'S RIGHT.

24 Q. SAME DEPARTMENT; RIGHT?

25 A. YES.

1 Q. AND THAT DEPARTMENT EXISTS TO DATE?

2 A. YES.

3 Q. AND YOU ARE THE DIRECTOR OF THAT --

4 A. YES.

5 Q. SIR, DO YOU HAVE -- HAVE YOU HAD ANY
6 TRAINING IN ENVIRONMENTAL SAFETY?

7 A. NO.

8 MR. BENDER: WHAT DO YOU MEAN BY "TRAINING"? DO
9 YOU MEAN THROUGH EXPERIENCE, OR DO YOU MEAN PURPORTED
10 FORMAL EDUCATIONAL TRAINING, OR --

11 MS. EISENSTEIN: LET'S START WITH FORMAL TRAINING.

12 Q. DO YOU HAVE ANY FORMAL TRAINING IN THAT
13 FIELD?

14 A. NO.

15 Q. DO YOU HAVE ANY INFORMAL TRAINING OR
16 EXPERIENCE IN THAT FIELD?

17 A. JUST THE EXPERIENCE THAT I WOULD GET UNDER
18 THE CARRYING OUT OF MY NORMAL DUTIES, INFORMING THE
19 VARIOUS PEOPLE OF THE REGULATIONS OF -- THAT I SEARCHED
20 OUT. IT'S LIKE A FRINGE TYPE OF AN AREA OF ENDEAVOR.

21 Q. HOW DID VANDERBILT ARRIVE AT THE NAME OF
22 DIRECTOR OF ENVIRONMENTAL AFFAIRS?

23 A. I POLLED ALL THE PEOPLE WHO WORK IN OTHER
24 COMPANIES, WHO WERE DOING THE SAME TYPE OF WORK AS I WAS,
25 AND I FOUND OUT THAT ONE OF THOSE COMMON NAMES FOR PEOPLE

1 WHO DO WHAT I DO IS DIRECTOR OF ENVIRONMENTAL AFFAIRS, SO
2 I DECIDED THAT WE WOULD TRY THAT ONE OUT.

3 Q. AS DIRECTOR OF ENVIRONMENTAL AFFAIRS, WHO
4 WOULD YOU REPORT TO?

5 A. EXECUTIVE VICE-PRESIDENT.

6 Q. OKAY. LET ME BACK UP FOR A MINUTE.

7 WHEN DID YOU DECIDE ON THE NAME OF DIRECTOR
8 OF ENVIRONMENTAL AFFAIRS?

9 A. ABOUT FIVE YEARS AGO.

10 Q. SO 1981?

11 A. I WOULD SAY THAT WOULD BE CLOSE.

12 Q. BUT PRIOR TO THAT TIME, YOU WERE STILL
13 FULFILLING THE SAME DUTIES, JUST WITHOUT THAT TITLED?

14 A. THAT'S RIGHT. MY DUTIES NEVER CHANGED. MY
15 TITLE, AS I SAID, CHANGED TWO OR THREE TIMES.

16 Q. RIGHT. SO SINCE APPROXIMATELY 1972, YOU
17 WERE DOING THE SAME SORT OF DUTIES FOR THE COMPANY THAT
18 YOU ARE DOING TODAY?

19 A. YES.

20 Q. WHO DO YOU REPORT TO TODAY?

21 A. EXECUTIVE VICE-PRESIDENT.

22 Q. DID I ASK THE NAME OF THE EXECUTIVE
23 VICE-PRESIDENT?

24 MR. BENDER: NO, YOU DID NOT.

25 BY MR. EISENSTEIN:

1 Q. COULD YOU TELL ME, PLEASE?

2 A. NO, YOU DID NOT.

3 THE PRESENT EXECUTIVE VICE-PRESIDENT --
4 HOLD ON. I REPORTED TO THE EXECUTIVE VICE-PRESIDENT FOR
5 -- FROM 1972 UNTIL ABOUT A YEAR AGO, AND THAT MAN'S NAME
6 WAS THOMAS NOLAND, N-O-L-A-N-D.

7 I NOW REPORT, AND HAVE BEEN REPORTING FOR
8 THE LAST YEAR, TO THE CHIEF OPERATING OFFICER, MR. GUS
9 FIEDERLEIN, AND THAT'S F-I-E-D-E-R-L-E-I-N.

10 Q. OKAY. DID MR. NOLAND RETIRE?

11 A. YES.

12 Q. DO YOU KNOW WHERE HE LIVES?

13 A. YES, I DO.

14 Q. AND WHERE IS THAT, SIR?

15 A. IN NEW CANAAN, CONNECTICUT.

16 Q. DO YOU HAPPEN TO KNOW HIS ADDRESS?

17 A. NO, I DON'T.

18 Q. WHEN DID HE LEAVE? IN 1985?

19 A. HE LEFT IN 1985, I BELIEVE.

20 Q. AND -- GUS FIEDERLEIN; IS THAT CORRECT?

21 A. YES, FIEDERLEIN.

22 Q. WHERE ARE HIS OFFICES LOCATED?

23 A. IN NORWALK.

24 Q. NORWALK, CONNECTICUT?

25 A. YES.

1 Q. IS THERE A MAIN CORPORATE HEADQUARTERS IN
2 NORWALK?

3 A. YES.

4 Q. WHAT IS THE ADDRESS, SIR?

5 A. 30 WINFIELD STREET, THAT'S W-I-N-F-I-E-L-D,
6 NORWALK. ZIP CODE IS 06855.

7 Q. THANK YOU.

8 WHAT IS THE SOURCE OF -- STRIKE THAT.

9 WHERE DO YOU GO TO GATHER INFORMATION ON
10 THE REGULATIONS WHICH YOU DISSEMINATE?

11 A. I ASSUME WHEN YOU SAY, "GO", PHYSICALLY, I
12 SIT IN MY --

13 Q. WHERE DO YOU FIND THIS INFORMATION?

14 A. VARIOUS PLACES. I THINK ONE OF THE MOST
15 PROLIFIC SOURCES WOULD BE THE FEDERAL REGISTER.

16 Q. OKAY. ANY OTHER SOURCES?

17 A. VARIOUS STATE GOVERNMENTS PUT FORTH
18 REGULATIONS THAT AFFECT US TO A CERTAIN EXTENT, AND IN
19 THAT CASE, THERE ARE A NUMBER OF WAYS OF GETTING THAT
20 INFORMATION. QUITE OFTEN, IT'S SENT TO US BY SOMEBODY
21 ELSE RATHER THAN ME READING THE EQUIVALENT OF A FEDERAL
22 REGISTER IN THAT PARTICULAR STATE.

23 Q. WHO WOULD BE THE TYPE OF PERSON TO SEND YOU
24 THIS INFORMATION, SIR?

25 A. THIS WOULD BE GATHERED QUITE OFTEN THROUGH

1 MEETINGS, TRADE ORGANIZATIONS, SUCH AS THE AMERICAN
2 MINING CONGRESS, OR THE NATIONAL PAINT AND COATINGS
3 ASSOCIATION.

4 Q. WAIT A SECOND. COULD YOU REPEAT, PLEASE,
5 THE SECOND ONE?

6 A. THE NATIONAL PAINT AND COATINGS
7 ASSOCIATION.

8 OR THE AMERICAN CERAMIC SOCIETY, OR ANY
9 OTHER TRADE ORGANIZATION THAT MAY HAVE SOMETHING OF
10 INTEREST TO US.

11 Q. SOMEONE AT ONE OF THESE TRADE ORGANIZATIONS
12 WOULD SEND YOU INFORMATION THEY THOUGHT YOU WERE
13 INTERESTED IN?

14 A. NOT SEND IT TO US, BUT WHAT -- IN THE
15 COURSE OF A MEETING OF SOME TYPE OR OTHER, CERTAIN RULES
16 AND REGULATIONS IN CERTAIN STATES WOULD BE BROUGHT TO THE
17 ATTENTION OF THE MEMBERS.

18 Q. WAS IT ONE OF YOUR DUTIES TO ATTEND, ON
19 BEHALF OF VANDERBILT, MEETINGS OF VARIOUS TRADE
20 ORGANIZATIONS?

21 A. YES.

22 Q. OKAY. YOU HAVE MENTIONED SO FAR THREE
23 DIFFERENT TRADE ORGANIZATIONS. COULD YOU TELL ME, SIR,
24 AT THE PRESENT TIME, WHAT TRADE ORGANIZATIONS VANDERBILT
25 -- YOU ARE A MEMBER OF ON BEHALF OF VANDERBILT?

1 A. ONE OF THEM IS THE NATIONAL PAINT AND
2 COATINGS ASSOCIATION. THE SECOND ONE IS THE AMERICAN
3 MINING CONGRESS, AND --

4 Q. LET ME STOP YOU FOR A MOMENT, SIR. LET'S
5 START WITH THE FIRST ONE.

6 DO YOU HOLD ANY EXECUTIVE CAPACITY WITH
7 THAT ORGANIZATION?

8 A. WHICH ONE?

9 Q. WITH THE FIRST ONE YOU MENTIONED, THE PAINT
10 AND --

11 A. NATIONAL PAINT --

12 Q. YEAH.

13 A. NO, I DON'T.

14 Q. HAVE YOU EVER?

15 A. NO.

16 Q. HAS ANYONE --

17 A. LET ME ASK YOU ONE QUESTION: EXACTLY WHAT
18 DO YOU MEAN BY EXECUTIVE POSITION, FOR THE OTHER --

19 Q. WHAT I MEAN IS ANY POSITION OF ANY KIND,
20 WITH ANY RESPONSIBILITIES FOR THAT --

21 A. ANY POSITION OF ANY KIND, WITH ANY
22 RESPONSIBILITIES?

23 Q. YES.

24 A. OKAY. TO ANSWER ON THE NATIONAL PAINT AND
25 COATINGS ASSOCIATION, NO.

1 Q. DO YOU KNOW OF ANYONE AT VANDERBILT THAT
2 HAS EVER HELD ANY POSITION WITH THE NATIONAL PAINT AND
3 COATINGS ASSOCIATION?

4 A. I DON'T -- I CAN'T RECALL ANYBODY.

5 Q. HOW LONG HAVE YOU BEEN A MEMBER OF THAT
6 ORGANIZATION?

7 A. IN THIS CASE, AND IN THE CASE OF MANY OF
8 THE ORGANIZATIONS THAT I SPOKE OF, THE COMPANY IS THE
9 MEMBER, AND THE COMPANY SENDS AN APPROPRIATE AND AN
10 INTERESTED MEMBER, A COMPANY EMPLOYEE, TO THE MEETINGS,
11 GATHERINGS OF THESE VARIOUS ORGANIZATIONS.

12 SO IT IS NOT EXACTLY A CASE OF AN
13 INDIVIDUAL EMPLOYEE BEING A MEMBER; IT'S THE CASE OF THE
14 COMPANY BEING THE MEMBER BUT SENDING THEIR REPRESENTATIVE
15 TO THE MEETING. IN MOST CASES, THAT IS THE WAY IT IS.

16 Q. WOULD IT BE CORRECT TO STATE THAT AN
17 EMPLOYEE, AN INTERESTED EMPLOYEE, GOES ON BEHALF OF THE
18 COMPANY TO THESE MEETINGS?

19 A. THAT'S RIGHT.

20 Q. HOW LONG HAVE YOU GONE ON BEHALF OF
21 VANDERBILT TO THE NATIONAL PAINT AND COATINGS ASSOCIATION
22 MEETINGS?

23 A. APPROXIMATELY TWELVE YEARS.

24 Q. SO THAT WOULD HAVE BEEN -- YOU BEGAN GOING
25 TO THEIR MEETINGS IN APPROXIMATELY 1974?

1 A. SOMEWHERE THERE, PLUS OR MINUS A COUPLE OF
2 YEARS.

3 Q. OKAY. TO YOUR KNOWLEDGE, HAS ANYONE ELSE
4 AT VANDERBILT EVER ATTENDED ANY NATIONAL PAINT AND
5 COATINGS ASSOCIATION MEETINGS?

6 A. YES.

7 Q. WHO ELSE WOULD HAVE ATTENDED MEETINGS?

8 A. MR. CARLSON, PRESENTLY WORKING -- IN THE
9 PAST, OR WHAT?

10 Q. ANYONE THAT YOU CAN RECALL, WHO HAS EVER
11 WORKED FOR --

12 A. MR. CARLSON AND MR. -- THE NAME ESCAPES ME,
13 BUT I HAD REMEMBERED IT BEFORE, WHEN -- IF YOU LOOK BACK
14 IN THE RECORD THERE, THE MAN I MENTIONED JUST BEFORE MR.
15 CARLSON.

16 Q. GUS FIEDERLEIN? NO.

17 A. NO. NO. WAY BACK.

18 MR. SIMON: ROSS?

19 THE WITNESS: ROSS, RIGHT.

20 BY MS. EISENSTEIN:

21 Q. ANYONE ELSE, SIR?

22 A. NOT THAT I CAN REMEMBER.

23 Q. OKAY. AM I CORRECT, SIR, IN ASSUMING THAT
24 THE FIRST TIME YOU WOULD HAVE GONE TO ONE OF THEIR
25 MEETINGS WOULD HAVE BEEN APPROXIMATELY TWELVE YEARS AGO?

1 A. APPROXIMATELY TWELVE YEARS AGO.

2 Q. OKAY. HOW OFTEN DOES THAT ORGANIZATION
3 MEET?

4 A. AT THE PRESENT TIME, IT MEETS, OH -- LET ME
5 BACK UP A LITTLE BIT.

6 THE ORGANIZATIONS, CALLED THE NATIONAL
7 PAINT AND COATINGS ASSOCIATION, HAS MANY COMMITTEES. A
8 COMMITTEE THAT I ATTEND, WHOSE MEETINGS I ATTEND, IS THE
9 HEALTH COMMITTEE, AND IT MEETS EVERY TWO MONTHS, ONCE
10 EVERY TWO MONTHS.

11 Q. OKAY. AND HOW LONG HAS THE HEALTH
12 COMMITTEE MET EVERY TWO MONTHS?

13 A. FOR ABOUT THE LAST YEAR. BEFORE THAT, IT
14 MET ONCE A MONTH, FOR AS FAR BACK AS I HAD BEEN GOING TO
15 THOSE MEETINGS.

16 Q. AND THAT WOULD HAVE BEEN TWELVE YEARS?

17 A. APPROXIMATELY TWELVE YEARS.

18 Q. OKAY. WHAT IS THE PURPOSE OF THE NATIONAL
19 PAINT AND COATINGS ASSOCIATION?

20 A. THE PURPOSE OF THAT PARTICULAR TRADE
21 ORGANIZATION IS SOMETHING LIKE ANY OTHER TRADE
22 ORGANIZATION: IT'S TO HELP THE MEMBERS IN THERE DAY TO
23 DAY CONDUCTING OF THEIR BUSINESS, IN AS MANY WAYS AS THEY
24 CAN.

25 Q. IN ANY ASPECTS OF INTEREST OR CONCERN TO

1 THAT PARTICULAR TYPE OF INDUSTRY?

2 A. YES.

3 Q. WHAT WAS THE PURPOSE OF THE HEALTH

4 COMMITTEE?

5 A. THE HEALTH COMMITTEE CONCENTRATED THEIR
6 EFFORTS ON HELPING THEIR MEMBERS ON MATTERS HAVING TO DO
7 WITH HEALTH.

8 Q. WHEN YOU SAY, "MATTERS HAVING TO DO WITH
9 HEALTH", CAN YOU GIVE ME SOME SPECIFICS, PLEASE?

10 A. YES. WHEN A NEW HEALTH STANDARD IS
11 PROMULGATED BY A GOVERNMENT AGENCY, THEY WOULD MAKE SURE
12 THAT THAT HEALTH STANDARD WAS INTERPRETED AND PASSED
13 ALONG TO -- AND ANY INFORMATION CONCERNING IT PASSED
14 ALONG TO THE MEMBERS, TO HELP THEM COMPLY WITH THAT
15 STANDARD.

16 Q. COULD YOU GIVE ME ANOTHER EXAMPLE, SIR?

17 A. THEY HAVE MEETINGS CONCERNING LABELING OR
18 PREPARATION OF MATERIAL SAFETY DATA SHEETS, ALL HAVING TO
19 DO WITH REGULATIONS. MOST OF THE -- MOST OF THE WORK OF
20 THE HEALTH COMMITTEE HAS -- IS GENERATED BY GOVERNMENT
21 REGULATIONS OF ONE TYPE OR ANOTHER, HAVING TO DO WITH
22 HEALTH.

23 Q. WHEN YOU SAY, "CONCERNING LABELING", WHAT
24 DO YOU MEAN?

25 A. IF THERE WAS A HEALTH STATEMENT REQUIRED ON

1 A LABEL FOR A PARTICULAR PRODUCT OR A CHEMICAL BEING
2 PREPARED, THEY WOULD ADVISE ANYONE IN THAT GROUP, WHO WAS
3 SELLING OR USING THAT PARTICULAR PRODUCT, OR THAT
4 PARTICULAR -- AS TO WHAT THE LABEL SHOULD READ.

5 Q. WHO WOULD ADVISE? OSHA?

6 A. NO. NO. NATIONAL PAINT AND COATINGS
7 ASSOCIATION, INTERPRETING THE REQUIREMENTS OF THE
8 LABELING REGULATION, WOULD HELP THE INDIVIDUAL MEMBERS
9 INTERPRET THOSE REQUIREMENTS, SO THAT THEY GOT THEM
10 RIGHT.

11 Q. WHO WAS MAKING THESE LABELING REQUIREMENTS
12 OF WHICH THIS COMMITTEE WOULD DISSEMINATE INFORMATION ON
13 TO MEMBERS?

14 A. WELL, ONE IN PARTICULAR WOULD BE THE
15 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, WHICH --

16 Q. ANY OTHER ADMINISTRATIVE BRANCHES OF
17 GOVERNMENT?

18 A. CONSUMER PRODUCT SAFETY COMMISSION, A
19 REGULATORY AGENCY.

20 Q. CAN YOU THINK OF ANY MORE, SIR?

21 A. NOT RIGHT NOW.

22 Q. OKAY. WHEN YOU SAY, "LABELING", ARE YOU
23 REFERRING TO LABELING A SPECIFIC PRODUCT?

24 A. YES.

25 Q. WHAT WOULD THIS LABEL CONTAIN?

1 A. IT WOULD CONTAIN WORDS OF CAUTION.
2 WARNING, DANGER, WHATEVER. THE PROPER WORDS TO COMPLY
3 WITH THE REGULATION FOR THAT PARTICULAR PRODUCT OR
4 CHEMICAL, OR A PRODUCT CONTAINING A PARTICULAR CHEMICAL.

5 Q. DID THIS COMMITTEE -- IN TERMS OF LABELING,
6 DID THIS COMMITTEE EVER DEVISE LABELS ON THEIR OWN, ASIDE
7 FROM THE REQUIREMENTS OF AN ADMINISTRATIVE BRANCH?

8 A. YES.

9 Q. WHEN WAS THE FIRST TIME THIS --

10 A. LET ME BACK UP. THIS COMMITTEE -- THE
11 NATIONAL PAINT AND COATINGS ASSOCIATION, THROUGH THAT
12 COMMITTEE, DEVISED -- I GUESS THAT'S A NUANCE, REALLY.

13 Q. WELL, WERE THE MEMBERS ON THAT COMMITTEE
14 RESPONSIBLE FOR COMING UP WITH -- OR WAS THAT THEIR --
15 WHAT THEY DID? THEY CAME UP WITH LABELS, IS THAT WHAT
16 YOU ARE SAYING, FOR THE ORGANIZATION?

17 A. NOT -- NOT SPECIFIC LABELS, BUT RATHER A
18 LABELING SYSTEM.

19 Q. WHEN YOU SAY, "LABELING SYSTEM", SIR, WHAT
20 DO YOU MEAN?

21 A. I MEAN A SYSTEM WHEREBY THE VARIOUS
22 CHEMICALS THAT, SAY, WOULD BE USED BY THE PAINT INDUSTRY
23 COULD ALL BE LABELED IN MUCH THE SAME MANNER, ACCORDING
24 TO A SYSTEM THAT THE -- THAT COMMITTEE OR THE NATIONAL
25 PAINT AND COATINGS ASSOCIATION WOULD DEVISE, IN ORDER TO

1 HELP IN THE RECOGNITION OF ANY HAZARDS WITHIN THE
2 WORKPLACE, AND SPECIFICALLY THE PAINT AND COATINGS
3 WORKPLACE.

4 Q. SIR, I AM STILL CONFUSED AS TO EXACTLY WHAT
5 YOU MEAN BY "SYSTEM." WAS THERE A CRITERIA?

6 A. IT INVOLVED CRITERION, YES. A SYSTEM WOULD
7 HAVE TO INVOLVE A CRITERIA.

8 Q. WHAT ELSE BESIDES CRITERIA WOULD BE
9 INVOLVED IN THIS SYSTEM?

10 A. THE PICTORIAL LAYOUT; THE SIZE OF THE
11 LETTERS; COLORS; NUMBERS. LETTERS, DIAGRAMS, AND THE
12 LIKE.

13 Q. WOULD THIS COMMITTEE BE RESPONSIBLE FOR THE
14 ACTUAL WORDING THAT WAS PLACED ON THESE LABELS?

15 A. NO; BECAUSE -- LET ME TELL YOU WHY:
16 BECAUSE THEY DEVISE A SYSTEM USING ONLY NUMBERS AND
17 LETTERS TO INDICATE THE DEGREE OF HAZARD, OR TO INDICATE
18 THE PROPER PROTECTIVE EQUIPMENT FOR THAT PARTICULAR --
19 THAT DEGREE OF HAZARD.

20 Q. OR EQUIPMENT NEEDED BY PEOPLE USING A
21 PARTICULAR CHEMICAL, OR --

22 A. THAT PARTICULAR CHEMICAL ON WHICH THE LABEL
23 -- THE CONTAINER ON WHICH THIS LABEL IS PLACED.

24 Q. OKAY. SO THESE LABELS THAT THIS COMMITTEE
25 WAS -- DEALT WITH DIDN'T ACTUALLY HAVE WORDS ON THEM;

1 THEY HAD NUMBERS AND LETTERS?

2 A. FOR THE MOST PART, YES.

3 Q. OKAY. WERE THERE EVER ANY LABELS DEALT
4 WITH IN THIS COMMITTEE THAT HAD WORDS ON THEM?

5 A. NOT TO MY KNOWLEDGE.

6 Q. NOW, YOU MENTIONED, A MOMENT AGO, THAT THIS
7 COMMITTEE WOULD DEVISE LABELS ASIDE FROM THE REQUIREMENTS
8 OR LABELS IMPOSED BY ADMINISTRATIVE AGENCIES LIKE OSHA;
9 IS THAT CORRECT?

10 A. THAT'S CORRECT.

11 Q. AND WHEN YOU ARE REFERRING TO THIS SYSTEM
12 OF LETTERS AND NUMBERS, IS THAT WHAT YOU ARE REFERRING
13 TO?

14 A. YES.

15 Q. OKAY. ANYTHING ELSE ASIDE FROM THIS SYSTEM
16 OF LETTER AND NUMBERS?

17 A. I TOLD YOU THAT THERE ARE CERTAIN PICTORIAL
18 LAYOUTS, AND COLORS AND SIZE.

19 Q. OKAY.

20 A. THAT'S ABOUT IT.

21 Q. SO THE PICTORIAL LAYOUT WAS SEPARATE FROM
22 THE LABELING OF LETTERS AND NUMBERS TO DESIGNATE A DEGREE
23 OF HAZARD?

24 A. YOU HAVE TO HAVE A PICTORIAL LAYOUT ON
25 WHICH TO PUT YOUR NUMBERS AND LETTERS, YOU SEE.

1 Q. OKAY. FINE.

2 CAN YOU TELL ME THE NAMES OF ANY OF THE
3 MEMBERS OF THAT COMMITTEE THAT HAVE SERVED WITH YOU?

4 A. YES, I CAN TELL YOU SOME OF THEM.

5 Q. OKAY. WOULD YOU PLEASE.

6 A. USING LAST NAMES, BECAUSE I DON'T KNOW --

7 Q. THAT'S FINE.

8 A. OKAY. KELLER.

9 Q. AND WAS THIS A MR. KELLER?

10 A. YES.

11 Q. WHAT COMPANY WAS HE FROM? WHERE IS HE
12 FROM?

13 A. PPG.

14 Q. WHAT DOES THAT STAND FOR, SIR?

15 A. THAT'S THE NAME OF THE COMPANY, PPG.

16 Q. WHAT KIND OF -- WHAT DO THEY PRODUCE, SIR?

17 A. PAINT.

18 Q. ANYONE ELSE ON THAT COMMITTEE?

19 A. JOHNSON, DUPONT.

20 Q. MR. JOHNSON?

21 A. MR. JOHNSON, FROM DUPONT.

22 Q. LET ME BACK UP FOR A MINUTE.

23 HOW LONG HAS MR. KELLER BEEN ON THAT
24 COMMITTEE?

25 A. PROBABLY ABOUT, A GUESS, TEN YEARS.

1 MR. BENDER: EXCUSE ME. DON'T GUESS; JUST YOUR
2 BEST ESTIMATE.

3 THE WITNESS: OKAY. APPROXIMATELY TEN YEARS.

4 BY MS. EISENSTEIN:

5 Q. HOW ABOUT MR. JOHNSON?

6 A. HE'S NO LONGER THERE. HE WAS ON
7 APPROXIMATELY TEN YEARS.

8 Q. WHEN WAS HE LAST ON THE COMMITTEE?

9 A. ABOUT A YEAR AGO.

10 Q. WHO ELSE IS ON THE COMMITTEE, SIR?

11 A. SMITH. SMITH.

12 Q. MR. SMITH?

13 A. YES.

14 Q. FROM WHAT COMPANY?

15 A. PRATT-LAMBERT COMPANY.

16 Q. ALSO A PAINT COMPANY, I ASSUME?

17 A. YES.

18 Q. OKAY. HOW LONG HAS MR. SMITH BEEN ON THE
19 COMMITTEE?

20 A. APPROXIMATELY TEN YEARS.

21 Q. HE'S PRESENTLY ON THE COMMITTEE?

22 A. YES.

23 Q. OKAY. WHO ELSE IS ON THE COMMITTEE?

24 A. I CAN'T REMEMBER THE NAMES OF THOSE OTHER
25 PEOPLE THAT ARE ON THERE NOW, AND I CAN'T REMEMBER TOO

1 MANY OF THE NAMES OF PEOPLE WHO WERE ON THERE AND DROPPED
2 OUT, BECAUSE THERE WAS A CONSTANT CHANGE OF PEOPLE.

3 Q. CAN YOU REMEMBER THE NAMES OF ANY
4 INDIVIDUALS WHO ARE NO LONGER ON THE COMMITTEE, THAT WERE
5 AT ONE TIME?

6 A. OH, I CAN REMEMBER ONE OF THEM FROM --
7 GAUGUSH, G-A-U-G-U-S-H, SHERWIN WILLIAMS COMPANY, A PAINT
8 COMPANY.

9 Q. AND WHEN WAS HE LAST ON THE COMMITTEE?

10 A. ABOUT THREE YEARS AGO.

11 Q. AND FOR HOW LONG PRIOR TO THAT TIME?

12 A. I DON'T KNOW, BECAUSE HE WAS THERE WHEN I
13 GOT THERE.

14 Q. YOU HAVE MENTIONED FOUR NAMES. CAN YOU
15 THINK OF ANYONE ELSE?

16 A. IT'S TOO HARD; I CAN'T -- I CAN'T REMEMBER
17 THEM.

18 Q. ARE THERE ANY MINUTES KEPT OF THIS
19 COMMITTEE?

20 A. YES.

21 Q. IS EVERY MEETING DOCUMENTED?

22 A. YES, IT IS.

23 Q. OKAY. DOES THE COMMITTEE HAVE A SECRETARY
24 OR SOMEONE IN CHARGE OF THOSE MINUTES?

25 A. YES.

- 1 Q. WHO WOULD THAT BE, SIR?
- 2 A. TODAY, IT'S MR. STEVE SIDES, S-I-D-E-S.
- 3 Q. AND WHERE DOES HE RESIDE; DO YOU KNOW?
- 4 A. I DON'T KNOW WHERE HE RESIDES.
- 5 Q. DO YOU KNOW WHERE HE WORKS?
- 6 A. YES, I DO.
- 7 Q. WHERE IS THAT?
- 8 A. THE NATIONAL PAINT AND COATINGS ASSOCIATION
- 9 BUILDING, WHICH IS AT 1500 RHODE ISLAND NORTHWEST, IN
- 10 WASHINGTON.
- 11 Q. WHAT IS HIS TITLE WITH THE ORGANIZATION?
- 12 A. I DON'T KNOW THE EXACT NAME OF THE TITLE.
- 13 Q. DOES HE ATTEND EVERY HEALTH COMMITTEE
- 14 MEETING?
- 15 A. YES.
- 16 Q. OKAY. AND TO YOUR KNOWLEDGE, IS HE THE ONE
- 17 WHO MAINTAINS THE MINUTES?
- 18 A. YES.
- 19 Q. DO YOU KNOW WHETHER OR NOT HE HAS A FILE OF
- 20 THOSE MINUTES?
- 21 A. I DON'T KNOW.
- 22 Q. HAVE YOU EVER REQUESTED COPIES OF MINUTES
- 23 FROM PREVIOUS MEETINGS?
- 24 A. NO, I HAVEN'T.
- 25 Q. DO YOU RECEIVE COPIES OF THE MINUTES FROM

1 THE MEETINGS?

2 A. YES, I DO.

3 Q. DO YOU KEEP THOSE COPIES?

4 A. SOME OF THEM.

5 Q. WHERE DO YOU KEEP THOSE?

6 A. IN MY FILES IN MY OFFICE.

7 Q. AND DO YOU MAINTAIN THOSE FILES IN YOUR
8 OFFICE?

9 A. YES.

10 Q. AND COULD YOU GIVE ME THE EXACT ADDRESS OF
11 WHERE THAT OFFICE IS?

12 A. IT'S AT 30 WINFIELD STREET, IN NORWALK.

13 Q. ARE THOSE YOUR PERSONAL FILES?

14 A. WHAT DO YOU MEAN BY THAT?

15 Q. WELL, ARE THOSE -- DOES ANYONE ELSE HAVE
16 ACCESS TO THOSE FILES, ASIDE FROM YOU?

17 A. YES.

18 Q. WHO ELSE HAS ACCESS TO THOSE FILES?

19 A. MY SECRETARY.

20 Q. WHAT IS YOUR SECRETARY'S NAME, SIR?

21 A. SUSAN KELLY.

22 Q. HOW LONG HAS SHE BEEN YOUR SECRETARY?

23 MR. BENDER: EXCUSE ME. WHAT IN THE WORLD DOES
24 THIS HAVE TO DO WITH BEING RELEVANT OR TO THE ISSUES
25 INVOLVED IN THIS LITIGATION?

1 MS. EISENSTEIN: I THINK THIS IS VERY RELEVANT TO
2 THE ISSUES INVOLVED IN THIS LITIGATION, CONSIDERING THE
3 NATURE OF THE EMPLOYMENT OF THE PLAINTIFF, AND HER
4 EXPOSURE TO TALC, AND THIS HEALTH COMMITTEE IS EXTREMELY
5 RELEVANT.

6 MR. BENDER: HOW LONG HIS SECRETARY HAS BEEN
7 EMPLOYED AND WORKED FOR HIM HAS NOTHING TO DO WITH
8 ANYTHING INVOLVED IN THIS CASE.

9 I WILL INSTRUCT YOU NOT TO ANSWER.

10 MS. EISENSTEIN: FINE.

11 Q. SIR, ASIDE FROM SUSAN KELLY AND YOURSELF,
12 DOES ANYONE ELSE HAVE ACCESS TO THIS FILE?

13 A. YES.

14 Q. WHO ELSE WOULD THAT BE?

15 A. PAUL VANDERBILT.

16 Q. AND WHO IS PAUL VANDERBILT?

17 MR. BENDER: YOU WERE INTRODUCED TO HIM, COUNSEL.
18 HE'S SEATED TO MY LEFT.

19 MS. EISENSTEIN: OKAY. THANK YOU.

20 Q. AND WHAT IS MR. VANDERBILT'S TITLE WITH THE
21 COMPANY?

22 A. SECRETARY.

23 Q. AND MR. VANDERBILT -- IS MR. VANDERBILT AN
24 ATTORNEY?

25 A. YES.

1 MR. VANDERBILT: NO.

2 MR. BENDER: HE STUDIED LAW.

3 MS. EISENSTEIN: OKAY.

4 Q. ANYONE ELSE ASIDE FROM MR. VANDERBILT, MISS
5 KELLY AND YOURSELF WHO HAVE ACCESS TO THIS FILE?

6 A. YES.

7 Q. WHO WOULD THAT BE?

8 A. JOHN KELSE, K-E-L-S-E.

9 Q. AND WHAT IS HIS POSITION WITH THE COMPANY?

10 A. CORPORATE INDUSTRIAL HYGIENIST.

11 Q. HOW LONG HAS MR. KELSE BEEN WITH THE
12 COMPANY?

13 A. APPROXIMATELY FOURTEEN MONTHS.

14 Q. SO IF YOU WANTED TO FIND MINUTES FROM PRIOR
15 MEETINGS OF THIS HEALTH COMMITTEE, IS THAT THE ONLY PLACE
16 THAT YOU WOULD GO? THOSE FILES YOU JUST MENTIONED?

17 A. IF I WANTED TO FIND MINUTES TO PRIOR
18 MEETINGS, I WOULD GO FIRST TO THE NATIONAL PAINT AND
19 COATINGS ASSOCIATION AND SEE IF THEY HAD THEM.

20 Q. TO STEVE SIDES?

21 A. YES.

22 Q. ANYONE ELSE THERE THAT YOU WOULD CONTACT IF
23 YOU WANTED TO FIND THE MINUTES?

24 A. NO.

25 MS. EISENSTEIN: DO YOU WANT TO TAKE A SHORT

1 BREAK?

2 MR. BENDER: SURE.

3 (A BREAK WAS TAKEN AT THIS TIME.)

4 MS. EISENSTEIN: BACK ON THE RECORD AFTER A SHORT
5 BREAK.

6 Q. SIR, WHAT IS YOUR UNDERSTANDING OF THE
7 TERM, "CONFORMAL COATINGS PROCESS"?

8 A. I DON'T KNOW WHAT IT IS.

9 Q. YOU DON'T KNOW WHAT "CONFORMAL COATINGS
10 PROCESS" IS?

11 A. NO.

12 Q. OKAY. THIS HEALTH COMMITTEE THAT YOU WERE
13 A MEMBER OF, WHAT PRODUCTS AT VANDERBILT WERE DISCUSSED
14 AT THAT COMMITTEE?

15 A. ONLY ONE PRODUCT.

16 Q. WHAT WOULD THAT HAVE BEEN, SIR?

17 A. OUR TALC PRODUCT.

18 Q. AND BY "TALC PRODUCT", DO YOU MEAN VARIOUS
19 TYPES OF TALCS PRODUCED BY VANDERBILT?

20 A. YES.

21 Q. HOW MANY TYPES OF TALC PRODUCTS DOES
22 VANDERBILT PRODUCE?

23 A. WHAT DO YOU MEAN BY "TYPES"?

24 Q. WELL, I AM NOT SURE, SIR; THAT'S WHY I AM
25 ASKING.

1 ARE THERE NAMES FOR DIFFERENT PRODUCTS
2 WHICH VANDERBILT PRODUCES, WHICH CONTAIN TALC?

3 A. OUR TALC PRODUCTS ARE ALL -- ALL TALC; WE
4 DON'T HAVE PRODUCTS THAT CONTAIN TALC.

5 Q. TALC IS THE PRODUCT; IS THAT CORRECT?

6 A. YES.

7 Q. OKAY.

8 A. IT'S INDUSTRIAL TALC.

9 Q. RIGHT, INDUSTRIAL TALC.

10 DO THESE DIFFERENT TALC PRODUCTS CONTAIN
11 DIFFERENT MINERALS, DIFFERENT COMPOSITION?

12 A. YES.

13 Q. AND THAT WOULD BE THE BASIS FOR
14 DIFFERENTIATING BETWEEN THE TYPES OF TALC PRODUCED?

15 A. NO.

16 Q. OKAY.

17 A. WELL, NOT -- NOT EXACTLY, BECAUSE WE SELL
18 TALCS FROM ONE AREA, WHICH IS THE GOUVERNEUR, NEW YORK
19 AREA, AND WE SELL TALCS THAT ARE MINED IN CANADA. WE
20 HAVE TWO TYPES OF TALCS.

21 Q. OKAY. WHEN YOU SAY --

22 A. SO THAT MODIFIES THAT QUESTION.

23 Q. WHEN YOU SAY, "TWO TYPES OF TALCS," DO YOU
24 MEAN BECAUSE THEY ARE MINED FROM DIFFERENT AREAS?

25 A. YES.

1 Q. LET ME ASK IT THIS WAY: WHAT DO YOU MEAN
2 WHEN YOU SAY YOU HAVE TWO TYPES OF TALC?

3 A. THE TALCS THAT COME OUT OF THE ONE AREA
4 HAVE MORE OR LESS THE SAME GENERAL COMPOSITION, MORE OR
5 LESS; NOT THE SAME BUT MORE OR LESS. THE OTHER TALCS
6 CONTAIN QUITE DIFFERENT COMPOSITION, INDUSTRIAL TALC.

7 Q. INDUSTRIAL TALC. IS THAT OPPOSED TO PURE
8 TALC?

9 A. THAT'S RIGHT.

10 Q. IS THAT WHY YOU USE THE WORD, "INDUSTRIAL
11 TALC", TO DESIGNATE --

12 A. YES.

13 Q. OKAY. YOUR TALCS WITH DIFFERENT CHEMICAL
14 COMPOSITIONS, ARE THEY DESIGNATED BY DIFFERENT NAMES?

15 A. ARE YOU TALKING NOW ABOUT THE TWO TYPES OF
16 TALCS?

17 Q. ARE THERE -- I AM TALKING ABOUT ALL OF YOUR
18 TALC PRODUCTS. DO THEY -- ARE THEY BROKEN DOWN INTO
19 DIFFERENT PRODUCT NAMES, LIKE NYTAL, FOR EXAMPLE?

20 A. NYTAL IS A NAME OF A LINE OF TALCS.

21 Q. OKAY. AND COULD YOU SPELL NYTAL, PLEASE,
22 SIR?

23 A. N-Y-T-A-L.

24 Q. THERE ARE DIFFERENT LINES OF TALC; IS THAT
25 CORRECT?

1 A. THAT'S RIGHT.

2 Q. NYTAL IS JUST ONE --

3 OKAY. SO IN PARTICIPATING IN THE HEALTH
4 COMMITTEE FOR THE ORGANIZATION WE WERE JUST TALKING
5 ABOUT, NATIONAL PAINT AND COATINGS ASSOCIATION --

6 A. YES.

7 Q. -- YOU WERE THERE, DUE TO THE USE OF YOUR
8 PRODUCT, TALC, IN PAINT; IS THAT CORRECT?

9 A. THAT'S RIGHT.

10 Q. OKAY. WERE DIFFERENT PRODUCT LINES OF YOUR
11 TALC SOLD TO THE PAINT INDUSTRY?

12 A. NO. THEY BOUGHT ALL ONE LINE.

13 Q. AND WHAT LINE WOULD THAT HAVE BEEN, SIR?

14 A. THAT'S THE NYTAL LINE AND THE I.T. LINE,
15 WHICH WERE ALL IN THE SAME SORT OF GROUPING.

16 Q. OKAY. WHAT DO YOU MEAN WHEN YOU SAY, "THE
17 SAME SORT OF GROUPING"?

18 A. THEY ALL PERFORM IN PAINT.

19 Q. OKAY. WHAT IS THEIR FUNCTION IN PAINT?

20 A. MOSTLY TO IMPROVE THE DURABILITY OF THE
21 COATINGS.

22 Q. OKAY. I WOULD LIKE TO GO BACK TO THE
23 HEALTH COMMITTEE NOW, SIR.

24 DID THIS HEALTH COMMITTEE EVER ENLIST THE
25 SERVICES OF ANY OUTSIDE ENTITIES OR INDIVIDUALS IN ITS --

1 IN DEVISING ITS -- IN CONDUCTING ANY OF ITS ACTIONS?

2 A. I DON'T REMEMBER.

3 Q. IS IT POSSIBLE, SIR -- WELL --

4 MR. BENDER: EXCUSE ME.

5 MS. EISENSTEIN: SORRY?

6 MR. BENDER: I WAS GOING TO OBJECT TO THE QUESTION.

7 MR. SIMON: WHATEVER THE QUESTION WAS!

8 MS. EISENSTEIN: I CHANGED MY MIND!

9 Q. WAS IT ONE OF THE FUNCTIONS OF THIS
10 COMMITTEE, OR ANY INDIVIDUAL ON THIS COMMITTEE, TO BE
11 WELL VERSED IN MEDICAL DATA THEN, REGARDING THE PAINT
12 INDUSTRY?

13 A. I DON'T KNOW.

14 Q. YOU DON'T KNOW?

15 A. (NO AUDIBLE RESPONSE.)

16 Q. TO YOUR KNOWLEDGE, WAS ANYONE, OR IS
17 ANYONE, AT THIS TIME, ON THAT COMMITTEE HAVE ANY -- HAVE
18 ANY KNOWLEDGE ON THE MEDICAL DATA?

19 MR. BENDER: JUST A MOMENT. THAT IS ASKING THIS
20 WITNESS TO TESTIFY TO WHAT SOMEONE ELSE KNOWS. YOU KNOW
21 THAT'S IMPROPER.

22 MS. EISENSTEIN: JUST IF HE KNOWS; JUST IF HE
23 KNOWS.

24 MR. BENDER: THAT'S AN IMPROPER QUESTION. I WILL
25 INSTRUCT HIM NOT TO ANSWER IT.

1 MR. SIMON: CAN WE GET A STIPULATION THAT AN
2 INSTRUCTION NOT TO ANSWER IS A REFUSAL TO ANSWER, FOR THE
3 PURPOSES OF ANY --

4 MR. BENDER: CERTAINLY. SO STIPULATED.

5 BY MS. EISENSTEIN:

6 Q. SIR, IN YOUR MEETINGS WITH THE HEALTH
7 COMMITTEE, DID YOU EVER BRING IN SPEAKERS TO TALK TO THE
8 COMMITTEE?

9 A. YES.

10 Q. CAN YOU TELL ME ON WHAT TOPICS THESE
11 SPEAKERS WOULD SPEAK?

12 A. YES.

13 Q. WHAT WOULD THEY BE, SIR?

14 A. ON TALC, ITS COMPOSITION.

15 Q. WAS THERE MORE THAN ONE SPEAKER?

16 A. NO.

17 Q. WHO WOULD THE SPEAKER HAVE BEEN?

18 A. DR. C.S. THOMPSON.

19 Q. AND WHO IS DR. THOMPSON?

20 A. MINERALOGIST FOR R.T. VANDERBILT COMPANY.

21 Q. DO YOU HAPPEN TO KNOW HOW LONG HE HAS BEEN
22 WITH VANDERBILT?

23 A. APPROXIMATELY TWELVE YEARS.

24 Q. WHEN WAS THE FIRST TIME YOU MET MR.
25 THOMPSON?

1 A. WHEN HE FIRST CAME TO WORK.

2 Q. TWELVE YEARS AGO?

3 A. WHENEVER THAT WAS.

4 Q. WHAT TOPIC, IN PARTICULAR, DID HE DISCUSS?

5 A. HE DISCUSSED THE COMPOSITION OF THE TALCS
6 THAT WE SELL TO THE PAINT INDUSTRY.

7 Q. THE COMPOSITION OF VANDERBILT TALCS?

8 A. THAT'S RIGHT; THE VANDERBILT TALCS THAT ARE
9 SOLD TO THE PAINT INDUSTRY.

10 Q. WHEN DID HE GIVE THIS TALK?

11 A. APPROXIMATELY THE FIRST YEAR HE CAME TO
12 WORK FOR US.

13 Q. APPROXIMATELY TWELVE YEARS AGO?

14 A. YES.

15 Q. WHO ASKED HIM TO COME AND TALK TO THE
16 COMMITTEE?

17 A. I DON'T KNOW.

18 Q. DO YOU REMEMBER THE CIRCUMSTANCES WHICH
19 OCCASIONED HIS COMING TO TALK WITH THE COMMITTEE?

20 A. NO, I DON'T.

21 Q. WELL, DID SOMEONE EXPRESS A CONCERN ON THE
22 COMMITTEE REGARDING THE COMPOSITION OF THE VANDERBILT
23 TALC?

24 A. I CAN'T REMEMBER.

25 Q. DID HE ASK TO COME AND SPEAK TO THE

1 COMMITTEE?

2 A. NO.

3 Q. HAVE YOU HAD ANY DISCUSSIONS WITH ANYONE ON
4 THE HEALTH COMMITTEE REGARDING ANY HEALTH HAZARDS
5 ASSOCIATED WITH VANDERBILT TALC PRODUCTS?

6 A. YES.

7 Q. WHEN WAS THE FIRST TIME YOU REMEMBER HAVING
8 A DISCUSSION OF THIS TYPE?

9 A. I CAN'T REMEMBER.

10 Q. WHO WAS THE DISCUSSION WITH?

11 A. I CAN'T REMEMBER THAT.

12 Q. DO YOU THINK YOU HAVE HAD MORE THAN ONE
13 DISCUSSION WITH MEMBERS OF THIS COMMITTEE ON THAT
14 SUBJECT?

15 A. YES.

16 Q. HAVE YOU HAD MANY DISCUSSIONS? WOULD YOU
17 CHARACTERIZE THEM AS "MANY"?

18 A. SEVERAL.

19 Q. CAN YOU REMEMBER WHAT OCCASIONED THESE
20 DISCUSSIONS?

21 A. NO, I CAN'T.

22 Q. OKAY. DID SOMEONE PERSONALLY EXPRESS TO
23 YOU A CONCERN ABOUT THE HEALTH HAZARDS THAT MIGHT BE
24 ASSOCIATED WITH YOUR TALC PRODUCTS?

25 A. I DON'T REMEMBER.

1 Q. HAS ANYONE EVER EXPRESSED THAT CONCERN TO
2 YOU PERSONALLY?

3 A. YES.

4 Q. WHEN WAS THE FIRST TIME YOU REMEMBER THAT
5 CONCERN BEING EXPRESSED TO YOU?

6 A. I -- I CAN'T REMEMBER.

7 Q. APPROXIMATELY WHEN, SIR, WOULD THAT HAVE
8 BEEN, THE FIRST TIME?

9 A. I CAN'T REALLY REMEMBER.

10 Q. OKAY. DO YOU BELIEVE, AS YOU SIT HERE
11 TODAY, THAT MEMBERS OF THAT HEALTH COMMITTEE HAVE, AT
12 SOME POINT IN TIME, EXPRESSED TO YOU CONCERNS REGARDING
13 THE HEALTH HAZARDS THAT MAY OR MAY NOT BE ASSOCIATED WITH
14 YOUR PRODUCTS, TALC PRODUCTS?

15 A. I CAN'T REMEMBER THAT EITHER.

16 Q. AS YOU SIT HERE TODAY, YOU CANNOT REMEMBER
17 WHETHER ANYONE ON THAT COMMITTEE EVER EXPRESSED A CONCERN
18 REGARDING HEALTH HAZARDS IN YOUR TALC PRODUCT; IS THAT
19 CORRECT?

20 A. I CAN'T -- I CAN'T REMEMBER THAT, NO.

21 Q. OKAY. WHEN WAS THE LAST TIME YOU HAD A
22 DISCUSSION WITH ANYONE, PERSONALLY, REGARDING THE HEALTH
23 HAZARDS ASSOCIATED WITH YOUR TALC PRODUCTS?

24 MR. BENDER: THAT ASSUMES THAT THEY ARE HEALTH
25 HAZARDS.

1 MS. EISENSTEIN: HE'S ALREADY SAID HE'S HAD
2 CONVERSATIONS ABOUT THEM, COUNSEL, SO I THINK --

3 OKAY. FINE.

4 THE WITNESS: I CAN'T REMEMBER THAT EITHER.

5 BY MS. EISENSTEIN:

6 Q. WOULD YOU SAY THIS YEAR?

7 A. NO.

8 Q. WOULD YOU SAY 1985?

9 A. I WOULD SAY SOMETIME BEFORE THIS YEAR, AND
10 AFTER I JOINED THE THING IN 1974, OR WHENEVER IT WAS.

11 Q. OKAY. DID THIS HEALTH COMMITTEE COLLECT
12 DATA FROM OUTSIDE SOURCES ON HEALTH HAZARDS ASSOCIATED
13 WITH CHEMICALS THAT WENT INTO PART OF THE COMPOSITION OF
14 PAINT?

15 A. REPEAT THAT, WILL YOU PLEASE?

16 (THE RECORD WAS READ AS FOLLOWS:

17 "Q. OKAY. DID THIS HEALTH COMMITTEE
18 COLLECT DATA FROM OUTSIDE SOURCES ON HEALTH HAZARDS
19 ASSOCIATED WITH CHEMICALS THAT WENT INTO PART OF
20 THE COMPOSITION OF PAINT?"

21 THE WITNESS: I DON'T KNOW.

22 BY MS. EISENSTEIN:

23 Q. DID THIS COMMITTEE EVER RECEIVE ANY MEDICAL
24 DATA FROM REGULATORY AGENCIES REGARDING HEALTH HAZARDS OR
25 ALLEGED HEALTH HAZARDS ASSOCIATED WITH CHEMICALS THAT

1 COMPRISED PAINT PRODUCTS?

2 A. I DON'T REMEMBER.

3 Q. HAVE YOU HAD A CONVERSATION WITH ANY --
4 ANYONE WITH EXPERTISE IN THE AREA OF OCCUPATIONAL HEALTH
5 REGARDING --

6 A. YES.

7 Q. I WASN'T QUITE FINISHED WITH THE SENTENCE.
8 -- REGARDING THE HEALTH HAZARDS THAT ARE
9 ASSOCIATED OR ALLEGED TO BE ASSOCIATED WITH TALC
10 PRODUCTS?

11 A. YES.

12 Q. WHEN WAS THE LAST TIME YOU HAD A
13 CONVERSATION WITH SOMEONE IN THAT REGARD?

14 A. PROBABLY IN THE LAST COUPLE OF WEEKS.

15 Q. AND WHO WOULD THAT HAVE BEEN, SIR?

16 A. CONRAD RIEGER, R-I-E-G-E-R.

17 Q. WHO IS CONRAD RIEGER?

18 A. HE'S A CERAMIC ENGINEER WITH R.T.
19 VANDERBILT COMPANY.

20 Q. MY QUESTION WAS IN TERMS OF SOMEONE WITH
21 EXPERTISE IN THIS AREA OF OCCUPATIONAL HEALTH. IS HE AN
22 EXPERT IN THAT FIELD?

23 A. NO, HE'S NOT AN EXPERT.

24 Q. HE'S NOT AN EXPERT. WHAT WAS THE SUBSTANCE
25 OF YOUR CONVERSATION WITH MR. RIEGER?

1 A. THE SUBSTANCE WAS THE -- THE LACK OF -- OF
2 -- OF THE HEALTH PROBLEM ASSOCIATED -- OF HEALTH PROBLEMS
3 ASSOCIATED WITH EXPOSURE TO THE VANDERBILT TALCS, AND
4 THAT WAS A SERIOUS HEALTH PROBLEM.

5 Q. WHO WAS EXPRESSING THE STATEMENT THAT THERE
6 WAS A LACK OF A HEALTH PROBLEM?

7 A. WE BOTH WERE.

8 Q. YOU BOTH WERE?

9 A. (NO AUDIBLE RESPONSE.)

10 Q. WHAT DID YOU BASE YOUR STATEMENT ON?

11 A. I BASED MY STATEMENT ON THE STUDY CONDUCTED
12 BY DR. STEVEN LAMM OF THE HEALTH STUDY OF THE VANDERBILT
13 TALC WORKERS.

14 Q. WHEN WAS THAT STUDY DONE, SIR?

15 A. IT WAS COMPLETED APPROXIMATELY TWO YEARS
16 AGO.

17 Q. WHEN WAS IT STARTED, SIR?

18 A. APPROXIMATELY FIVE YEARS AGO.

19 Q. IT WAS STARTED IN APPROXIMATELY 1981?

20 A. APPROXIMATELY 1981.

21 Q. WHAT ARE STEVEN LAMM'S CREDENTIALS?

22 A. DR. STEVEN LAMM IS AN OCCUPATIONAL HEALTH
23 PHYSICIAN.

24 Q. HE'S AN M.D.?

25 A. YES.

1 Q. AND WHERE DOES HE WORK, SIR?

2 A. HE WORKS IN WASHINGTON.

3 Q. IS HE ASSOCIATED WITH ANYONE?

4 A. HE HAS HIS OWN RESEARCH -- CONSULTING FIRM
5 CALLED CONSULTANTS IN OCCUPATIONAL AND ENVIRONMENTAL
6 HEALTH.

7 Q. HOW LONG HAVE YOU KNOWN STEVEN LAMM?

8 A. APPROXIMATELY TEN YEARS.

9 Q. WAS HE, AT ONE TIME, ASSOCIATED WITH OTHER
10 INDIVIDUALS IN THE FIELD OF OCCUPATIONAL HEALTH?

11 A. YES.

12 Q. WHO WOULD THAT HAVE BEEN, SIR?

13 A. DR. TABERSHAW.

14 Q. WHAT IS DR. TABERSHAW'S FIRST NAME?

15 A. IRVING.

16 Q. OKAY. AND HOW LONG WAS HE ASSOCIATED WITH
17 DR. TABERSHAW?

18 A. I CAN'T REMEMBER.

19 Q. DID HE PARTICIPATE IN A STUDY WITH DR.
20 TABERSHAW?

21 A. WHAT KIND OF STUDY?

22 Q. A STUDY COMMISSIONED BY VANDERBILT.

23 A. YES.

24 Q. I WOULD LIKE TO GO BACK TO THE STUDY THAT
25 WAS BEGUN IN 1981.

1 DID VANDERBILT COMMISSION THAT STUDY?

2 A. YES.

3 Q. WHO AT VANDERBILT MADE THE DECISION TO
4 COMMISSION THAT STUDY?

5 A. THAT WOULD BE A DECISION THAT WOULD BE
6 AUTHORIZED BY THE -- THE BOARD OF DIRECTORS -- NOT THE
7 BOARD OF DIRECTORS, BUT THE STAFF OF THE -- OF THE -- THE
8 EXECUTIVE STAFF.

9 Q. WHO ARE THE MEMBERS OF THE EXECUTIVE STAFF,
10 SIR?

11 A. MR. VANDERBILT, H.B. VANDERBILT, SR.; MR.
12 FIEDERLEIN, WHO I MENTIONED BEFORE, TODAY. MR. NIEHAUS,
13 N-I-E-H-A-U-S. MR. GORMAN, G-O-R-M-A-N. MR. SHORT,
14 S-H-O-R-T.

15 I THINK I HAVE COVERED MOST OF THEM.

16 Q. WHAT IS MR. VANDERBILT, SR.'S TITLE WITH
17 THE COMPANY?

18 A. I DON'T -- I DON'T KNOW WHAT IT IS TODAY.

19 Q. WHAT ABOUT MR. NIEHAUS?

20 A. I DON'T KNOW WHAT HIS TITLE IS TODAY.

21 Q. MR. GORMAN?

22 A. GORMAN IS DIRECTOR OF SALES.

23 Q. HOW ABOUT MR. SHORT?

24 A. DIRECTOR OF THE LABORATORY.

25 Q. IS THERE ONE INDIVIDUAL AT THE COMPANY IN

1 CHARGE OF MINING, OR MANUFACTURING?

2 A. MINING AND MANUFACTURING, YES, THERE IS.

3 Q. WHO WOULD THAT BE?

4 A. MR. H.B. VANDERBILT, JR.

5 Q. WOULD HE HAVE PARTICIPATED IN MAKING THE
6 DECISION TO COMMISSION THIS STUDY?

7 A. NO.

8 Q. IS THERE ANYONE OTHER THAN MR. H.B.
9 VANDERBILT, JR. -- STRIKE THAT.

10 DOES MR. H.B. VANDERBILT, JR. HAVE ANY
11 RESPONSIBILITIES FOR TALC?

12 A. WHAT SORT OF RESPONSIBILITIES?

13 Q. PRODUCTION OF TALC.

14 A. YES. HE WAS -- PRODUCTION OF TALC, YES, AS
15 AN OVERALL VICE-PRESIDENT IN CHARGE OF MINING.

16 Q. OKAY. DO YOU KNOW WHO WOULD BE DIRECTLY
17 UNDER HIM, IN TERMS OF RESPONSIBILITY FOR MINING TALC?

18 A. THAT WOULD BE MR. GEORGE ERDMAN.

19 Q. COULD YOU SPELL HIS LAST NAME, PLEASE?

20 A. E-R-D-M-A-N.

21 Q. NOW, THESE INDIVIDUALS WE HAVE DISCUSSED SO
22 FAR, THE ONES ON THE EXECUTIVE STAFF, INCLUDING H.B.
23 VANDERBILT, JR. AND MR. GEORGE ERDMAN, ARE THEY ALL
24 LOCATED IN CONNECTICUT, AT THE MAIN OFFICE?

25 A. NO.

1 Q. OKAY. WHERE IS MR. H.B. VANDERBILT, JR.
2 LOCATED?

3 A. NORWALK; EXECUTIVE OFFICE.

4 Q. WHAT ABOUT MR. ERDMAN?

5 A. HE'S LOCATED AT GOUVERNEUR TALC COMPANY'S
6 OFFICE IN THE TOWN OF BALMAT, B-A-L-M-A-T, NEW YORK.

7 Q. DO YOU KNOW WHO IS UNDER HIM, IN CHARGE OF
8 TALC MINING?

9 A. NO, I DON'T.

10 Q. I WANT TO GO BACK TO THAT STUDY THAT WAS
11 COMMISSIONED IN 1981. DID YOU PARTICIPATE IN THE
12 DECISION TO COMMISSION THAT STUDY?

13 A. YES.

14 Q. WHAT WAS YOUR PARTICIPATION?

15 A. MOSTLY AS AN ADVISOR OF WHETHER THE STUDY
16 SHOULD BE DONE OR NOT.

17 Q. AND WHAT WAS YOUR ADVICE, SIR?

18 A. THAT THE STUDY SHOULD BE DONE.

19 Q. SHOULD OR SHOULDN'T?

20 A. SHOULD.

21 Q. SHOULD?

22 A. (NO AUDIBLE RESPONSE.)

23 Q. AND WHY DID YOU BELIEVE THE STUDY SHOULD BE
24 DONE?

25 A. I BELIEVE, AT THAT TIME, I WANTED TO

1 SUPPLEMENT THE STUDY DONE BY DR. TABERSHAW A FEW YEARS
2 PRIOR TO THAT, WHICH CAME UP WITH ROUGHLY THE SAME
3 CONCLUSION.

4 Q. OKAY. DID ANYONE ELSE WORK WITH DR. LAMM
5 ON THE STUDY, THE 1981 STUDY?

6 A. YES, THERE WAS A PERSON, BUT I DON'T KNOW
7 THE NAME.

8 Q. WAS IT ANOTHER MEDICAL DOCTOR?

9 A. I DON'T KNOW WHAT HER CREDENTIALS WERE.

10 Q. WAS THE STUDY PUBLISHED?

11 A. IT HAS BEEN SUBMITTED FOR PUBLICATION.

12 Q. OKAY. HAVE YOU REVIEWED THE STUDY?

13 A. YES.

14 Q. IN ITS FINAL FORM?

15 A. YES.

16 Q. DO YOU HAVE A COPY OF THE STUDY AT YOUR
17 OFFICES?

18 A. YES.

19 Q. OKAY. WHERE, AT YOUR OFFICES, WOULD THAT
20 STUDY BE?

21 A. IN MY FILES.

22 Q. IN YOUR FILES?

23 A. UH-HUH.

24 Q. WHAT WOULD BE THE DESIGNATION -- IF YOU
25 WANTED TO FIND THAT STUDY, WHERE IN YOUR FILES WOULD YOU

1 LOOK?

2 A. UNDER DR. LAMM.

3 Q. UNDER DR. LAMM. ARE THESE THE SAME FILES
4 THAT YOU WERE DESCRIBING EARLIER?

5 A. YES.

6 Q. OKAY. WHY DID YOU WANT TO SUPPLEMENT THE
7 STUDY DONE BY DR. TABERSHAW?

8 A. DR. TABERSHAW CONCENTRATED HIS HEALTH STUDY
9 ON THE WORKERS, EMPLOYEES OF THE GOUVERNEUR TALC COMPANY,
10 WHICH IS A SUBSIDIARY, OF COURSE, OF THE R.T. VANDERBILT
11 COMPANY.

12 WHAT I HAD SUGGESTED WAS THAT DR. LAMM
13 SUPPLEMENT THAT STUDY BY COMPARING THOSE RESULTS WITH THE
14 RESULTS OF THE NIOSH -- THAT'S THE NATIONAL INSTITUTE OF
15 OCCUPATIONAL SAFETY AND HEALTH -- STUDY OF TALC WORKERS
16 IN VERMONT.

17 Q. WHEN WAS THE NIOSH STUDY FROM VERMONT DONE;
18 DO YOU KNOW?

19 A. APPROXIMATELY EIGHT YEARS AGO.

20 Q. SO THAT WOULD HAVE BEEN ABOUT 1978?

21 A. 19 --

22 Q. YEAH.

23 A. YES.

24 Q. AND WHY DID YOU WANT TO COMPARE THE TWO
25 STUDIES?

1 A. BOTH STUDIES -- BOTH DR. TABERSHAW'S STUDY
2 AND THE NIOSH STUDY CAME OUT WITH APPROXIMATELY THE SAME
3 CONCLUSIONS, THE SAME RESULTS.

4 Q. AM I CORRECT IN THE ASSUMPTION THAT DR.
5 TABERSHAW'S STUDIES DEALT WITH TALC MINERS, YOUR TALC
6 MINERS IN NEW YORK?

7 A. YES.

8 Q. AND THE NIOSH STUDY DEALT WITH TALC MINERS
9 IN VERMONT?

10 A. THAT'S RIGHT.

11 Q. OKAY. THERE WAS A PRIOR NIOSH STUDY ON
12 YOUR TALC WORKERS; IS THAT CORRECT?

13 A. YES.

14 Q. BUT THAT'S NOT THE STUDY YOU ARE REFERRING
15 TO NOW?

16 A. NO.

17 Q. WAS THIS VERMONT STUDY A LATER STUDY?

18 A. LATER STUDY THAN WHAT?

19 Q. THAN THE NIOSH STUDY ON YOUR TALC WORKERS.

20 A. I THINK IT PRECEDED IT BY A FEW YEARS.

21 Q. OKAY. WHEN YOU SAY THE TABERSHAW STUDY, DO
22 YOU MEAN ONE STUDY OR MORE THAN ONE STUDY?

23 A. THE ONE STUDY THAT WAS PUBLISHED IN THE
24 JOURNAL OF OCCUPATIONAL MEDICINE.

25 Q. DID DR. TABERSHAW DO MORE THAN ONE STUDY

1 REGARDING YOUR TALC MINERS?

2 A. NO.

3 Q. DID HE DO MORE THAN ONE STUDY REGARDING
4 TALC MINERS IN GENERAL?

5 A. BY IN GENERAL, DO YOU MEAN ALL IN THE
6 WORLD?

7 Q. NOT SPECIFICALLY YOURS.

8 A. NO.

9 Q. AS YOU SIT HERE TODAY, ARE YOU AWARE OF
10 MORE THAN ONE STUDY BY DR. TABERSHAW REGARDING HEALTH
11 HAZARDS ASSOCIATED WITH EXPOSURE TO TALC, TO MINERS OF
12 TALC, INDUSTRIAL TALC?

13 A. ANYWHERE?

14 Q. THAT HE'S DONE.

15 A. ANY MINERS ANYWHERE, ANY --

16 Q. YES.

17 A. I AM NOT AWARE OF ANY.

18 Q. ARE YOU ONLY AWARE OF ONE STUDY DONE BY DR.
19 TABERSHAW, AND THAT'S THE ONE OF YOUR MINERS?

20 A. YES.

21 Q. AND THAT'S THE JOURNAL OF OCCUPATIONAL
22 MEDICINE STUDY?

23 A. YES.

24 Q. OKAY. WHEN WAS THAT STUDY COMMISSIONED?

25 A. APPROXIMATELY 1975.

1 Q. OKAY. AND THAT'S THE STUDY THAT DR. LAMM
2 WORKED ON?

3 A. DR. LAMM WORKED FOR A SHORT PERIOD ON THAT
4 STUDY.

5 Q. DO YOU KNOW IF HIS NAME IS ON THAT STUDY?

6 A. NO, IT IS NOT.

7 Q. IT IS NOT?

8 A. THE CO-AUTHOR ON THAT IS STILLE,
9 S-T-I-L-L-E.

10 Q. OKAY. NOW, THIS STUDY THAT WAS
11 COMMISSIONED IN 1981, OF DR. LAMM, WHAT EXACTLY --

12 A. APPROXIMATELY 1981.

13 Q. SORRY, SIR; APPROXIMATELY 1981.

14 -- WHAT EXACTLY WAS THE PURPOSE OF THE
15 STUDY TO BE?

16 A. AS I SAID BEFORE, AND I STARTED TO SAY, WE
17 WANTED TO COMPARE THAT STUDY, THE RESULTS OF THE STUDY,
18 THE TABERSHAW STUDY, WITH THE DETAILS AND THE DATA AND
19 THE RESULTS OF THE NIOSH STUDY OF THE VERMONT TALC
20 WORKERS IN ONE DOCUMENT.

21 Q. OKAY. WHY DID YOU WANT TO COMPARE THEM IN
22 ONE DOCUMENT?

23 A. WE WANTED TO SHOW -- WE WANTED TO SEE OR TO
24 SHOW THAT EVEN THOUGH THE TWO RESULTS -- EVEN THOUGH
25 THESE TALCS WERE DIFFERENT IN THEIR GENERAL COMPOSITION,

1 THEY BOTH -- THEY CAME OUT WITH ESSENTIALLY THE SAME
2 RESULTS, INsofar AS EXPOSURES -- THE RESULT OF THE
3 EXPOSURES ON THE HEALTH OF THE MINERS.

4 Q. AND WHAT WAS THE RESULT FROM THE VERMONT
5 STUDY, SIR?

6 A. THE RESULTS ON THE VERMONT STUDY WAS THAT
7 THE AMOUNT OF NONMALIGNANT RESPIRATORY DISEASE WAS IN
8 EXCESS OF THAT EXPECTED.

9 Q. WAS THE STUDY CONFINED TO NONMALIGNANT
10 RESPIRATORY DISEASES, OR DID IT ALSO INCLUDE MALIGNANT
11 RESPIRATORY DISEASES?

12 A. BOTH.

13 Q. OKAY. DO YOU KNOW WHAT THE FINDINGS WERE
14 IN REGARDS TO MALIGNANT RESPIRATORY DISEASES?

15 A. THE FINDINGS IN THE VERMONT STUDY WERE THE
16 SAME AS THE -- AS THE -- THE STUDY IN VERMONT ON
17 MALIGNANCE WAS IN AN EXPOSURE TO THOSE TALCS CAUSED --
18 ASSOCIATED WITH AN INCREASED RATE OF LUNG CANCER,
19 ASSOCIATED WITH AN INCREASED RATE OF LUNG CANCER.

20 Q. BY "ASSOCIATED WITH", DO YOU MEAN NIOSH
21 CONSIDERED EXPOSURE TO THAT PARTICULAR TALC A FACTOR IN
22 THE INDIVIDUAL'S CONTRACTION OF CANCER?

23 A. NO, THAT'S NOT RIGHT.

24 Q. WHAT DO YOU MEAN WHEN YOU USE THE WORDS,
25 "ASSOCIATED WITH"?

1 A. THAT'S SUPPOSED TO BE CONTRIBUTORY, OR A
2 FACTOR; ASSOCIATED MEANS. IN THAT CASE, THAT THERE WAS
3 AN INCREASE IN LUNG CANCER FOUND AMONGST THE WORKERS AT
4 THAT MINE, BUT IT COULD NOT BE ATTRIBUTED TO EXPOSURES TO
5 THE TALC DUST AT THAT MINE.

6 Q. THAT WAS NIOSH'S CONCLUSIONS?

7 A. YES.

8 Q. THAT -- NIOSH'S CONCLUSION FROM THE VERMONT
9 STUDY --

10 A. YES.

11 Q. -- WAS THAT THE LUNG CANCERS FOUND IN
12 WORKERS WHO HAD WORKED AT THE VERMONT MINE, THEIR LUNG
13 CANCER WAS NOT DUE TO EXPOSURE TO THAT MINE?

14 A. THAT'S RIGHT. IT COULD NOT BE ATTRIBUTED
15 TO EXPOSURES AT THE MINE.

16 Q. DO YOU KNOW WHAT NIOSH ATTRIBUTED THEIR
17 EXPOSURES TO -- I MEAN THEIR CANCER TO?

18 A. THEY SAID THERE WAS AN UNKNOWN ETIOLOGY.

19 Q. WHEN WE TALK ABOUT LUNG CANCER, IS THERE A
20 SPECIFIC TYPE OF LUNG CANCER THAT WAS -- THAT STUDY WAS
21 CONCERNED WITH?

22 A. I AM NOT A MEDICAL PERSON, SO I CANNOT GET
23 INTO THOSE DETAILS.

24 Q. OKAY. SO YOU DON'T HAVE ANY UNDERSTANDING
25 WHETHER THEY WERE TALKING ABOUT A SPECIFIC TYPE OF LUNG

1 CANCER?

2 A. NO, I DON'T.

3 Q. WHO OWNS THE VERMONT MINES THAT WERE BEING
4 STUDIED?

5 A. I DON'T KNOW.

6 Q. OKAY. DO YOU KNOW WHO AT NIOSH
7 PARTICIPATED IN THAT STUDY?

8 A. THE LEAD DOCTOR WAS NAMED BOUNDY,
9 B-O-U-N-D-Y. I DON'T KNOW THE OTHER NAMES.

10 Q. OKAY. WAS THIS A MORBIDITY STUDY? DO YOU
11 KNOW WHAT THAT IS?

12 A. YES, I DO. THIS WAS AN EPIDEMIOLOGY STUDY,
13 WHICH INCLUDES BOTH MORBIDITY AND MORTALITY.

14 Q. DID YOU READ THE STUDY, SIR?

15 A. YES.

16 Q. DO YOU HAVE A COPY OF THE STUDY?

17 A. NO, NOT WITH ME. NO.

18 Q. WHERE DID YOU OBTAIN THE STUDY?

19 A. I OBTAINED IT FROM A BOOK THAT'S PUBLISHED,
20 CALLED "DUSTS AND DISEASES."

21 Q. AND WHO ARE THE AUTHORS OF THAT BOOK, SIR;
22 DO YOU KNOW?

23 A. I DON'T KNOW.

24 Q. OKAY. HOW LONG HAVE YOU HAD THAT BOOK,
25 "DUSTS AND DISEASES"?

- 1 A. SINCE IT WAS PRINTED.
- 2 Q. WHEN WOULD THAT HAVE BEEN, SIR?
- 3 A. I DON'T REMEMBER.
- 4 Q. HAVE YOU HAD IT FOR MORE THAN FIVE YEARS?
- 5 A. YES.
- 6 Q. HAVE YOU HAD IT FOR MORE THAN TEN YEARS?
- 7 A. I DON'T KNOW.
- 8 Q. BUT YOU HAVE HAD IT SINCE APPROXIMATELY THE
- 9 TIME IT WAS PRINTED?
- 10 A. APPROXIMATELY SINCE THE TIME IT WAS
- 11 PRINTED, WHENEVER THAT WAS.
- 12 Q. WHERE DID YOU OBTAIN THAT BOOK FROM?
- 13 A. FROM THE PUBLISHER.
- 14 Q. AND HOW DID YOU FIND OUT ABOUT THAT BOOK?
- 15 A. I ATTENDED A CONFERENCE IN WASHINGTON, IN
- 16 WHICH ALL THE PAPERS THAT WERE GIVEN WERE PRINTED IN THAT
- 17 BOOK.
- 18 Q. WHEN DID YOU ATTEND THE CONFERENCE?
- 19 A. SOMETIME IN THE LAST FIFTEEN YEARS; I CAN'T
- 20 REMEMBER WHEN.
- 21 Q. WHO SPONSORED THE CONFERENCE?
- 22 A. THE SOCIETY FOR OCCUPATIONAL AND
- 23 ENVIRONMENTAL HEALTH.
- 24 Q. WAS THERE ONE INDIVIDUAL THAT WAS
- 25 RESPONSIBLE FOR PUTTING TOGETHER THIS CONFERENCE?

1 A. OBVIOUSLY, THERE WOULD BE, BUT I DON'T KNOW
2 WHO IT IS.

3 Q. OKAY. ARE YOU A MEMBER OF THE SOCIETY FOR
4 OCCUPATIONAL AND ENVIRONMENTAL HEALTH?

5 A. NO.

6 Q. IS VANDERBILT, AS AN ENTITY?

7 A. NO.

8 Q. NO? HOW DID YOU COME TO ATTEND THAT
9 CONFERENCE?

10 A. BY SOME MEANS THAT I CANNOT REMEMBER, I WAS
11 INFORMED THAT SUCH A CONFERENCE WAS TAKING PLACE.

12 Q. WHAT WERE YOU INFORMED WAS TO BE THE
13 PURPOSE OF THE CONFERENCE?

14 A. TO DISCUSS THE HEALTH HAZARDS ASSOCIATED
15 WITH EXPOSURES TO DUSTS.

16 Q. WERE THERE ANY DUSTS IN PARTICULAR WHICH
17 THIS CONFERENCE WAS GOING TO FOCUS ON?

18 A. I BELIEVE THERE -- THERE WAS AN AGENDA, AND
19 -- AT LEAST A PRELIMINARY AGENDA. THE AGENDA OBVIOUSLY
20 HAD MATTERS OF INTEREST TO ME, BUT I CAN'T RECALL WHAT
21 THOSE MATTERS WERE, SPECIFICALLY.

22 Q. OKAY. WHERE DID YOU OBTAIN THIS -- HOW DID
23 YOU REFER TO IT? A PRELIMINARY AGENDA?

24 A. YEAH. A -- YES, I GUESS SO.

25 Q. WHERE DID YOU OBTAIN THIS PRELIMINARY

1 AGENDA FROM?

2 A. I DON'T REMEMBER.

3 Q. BUT YOU OBTAINED IT BEFORE THE CONFERENCE?

4 A. YES.

5 Q. OKAY. THERE WERE CERTAIN MATTERS ON THIS
6 PRELIMINARY AGENDA WHICH WERE OF INTEREST TO YOU IN YOUR
7 CAPACITY AS -- I DON'T KNOW; WERE YOU A DIRECTOR OF
8 ENVIRONMENTAL AFFAIRS AT THAT TIME?

9 A. ESSENTIALLY THAT, THOUGH I MIGHT NOT HAVE
10 HAD THAT TITLE.

11 Q. OKAY. BUT IS THAT A YES OR A NO?

12 A. THAT'S A YES.

13 Q. OKAY. SO THERE WERE MATTERS THAT WERE OF
14 INTEREST TO YOU, AND THEY WERE HEALTH MATTERS?

15 A. THEY WERE MATTERS OF HEALTH AND MATTERS OF
16 DUST; THOSE ARE OF INTEREST TO ME.

17 Q. DO YOU REMEMBER, ON THAT PRELIMINARY
18 AGENDA, WAS ONE OF THE DUSTS TO BE DISCUSSED ASBESTOS?

19 A. I DON'T REMEMBER.

20 Q. OKAY. WAS TALC TO BE DISCUSSED?

21 A. YES.

22 Q. OKAY. DID ANYONE ELSE FROM VANDERBILT
23 ATTEND THAT CONFERENCE WITH YOU?

24 A. YES.

25 Q. WHO WOULD THAT HAVE BEEN?

1 A. DR. C.S. THOMPSON.

2 Q. AND WHAT, AT THAT TIME, WAS HIS JOB
3 CAPACITY?

4 A. SAME AS IT WAS BEFORE, WHEN I MENTIONED --
5 HE'S A MINERALOGIST.

6 Q. A MINERALOGIST. IS THAT HIS TITLE WITH THE
7 COMPANY? MINERALOGIST?

8 A. WELL, HE'S A MINERALOGIST; HIS TITLE IS
9 MANAGER OF THE MINERAL DEPARTMENT RESEARCH, SOMETHING
10 LIKE THAT.

11 Q. DID ANYONE ELSE BESIDES THE TWO OF YOU FROM
12 VANDERBILT ATTEND THAT CONFERENCE?

13 A. I CAN'T REMEMBER.

14 Q. HOW LONG WAS THAT CONFERENCE, IN TERMS OF
15 DAYS?

16 A. APPROXIMATELY THREE DAYS.

17 Q. AND YOU SAID IT WAS IN WASHINGTON?

18 A. YES.

19 Q. HOW MANY SPEAKERS DO YOU THINK THERE WERE
20 AT THAT CONFERENCE?

21 A. I CAN'T REMEMBER.

22 Q. DO YOU REMEMBER THE NAMES OF ANY OF THE
23 SPEAKERS?

24 A. YES.

25 Q. COULD YOU TELL ME THE NAMES YOU REMEMBER,

1 SIR?

2 A. DR. W.E. SMITH.

3 Q. WHAT DID DR. SMITH SPEAK ON?

4 A. HE SPOKE ON ANIMAL STUDIES HAVING TO DO
5 WITH EXPOSURES TO TALC DUSTS.

6 Q. WAS DR. SMITH COMMISSSIONED BY VANDERBILT
7 TO DO ANIMAL STUDIES?

8 A. YES.

9 Q. WHEN WAS HE COMMISSSIONED TO DO AN ANIMAL
10 STUDY?

11 A. APPROXIMATELY TEN YEARS AGO.

12 Q. SO IN APPROXIMATELY 1976?

13 A. APPROXIMATELY.

14 Q. OKAY. WHO AT VANDERBILT MADE THE DECISION
15 TO COMMISSION DR. SMITH TO DO THIS STUDY?

16 A. I DID.

17 Q. YOU DID? WHY?

18 A. I WANTED TO -- I WANTED TO SEE, I WANTED TO
19 DETERMINE, I WANTED DR. SMITH TO DETERMINE THE EFFECTS OF
20 EXPOSURE TO THESE ANIMALS THAT HE WAS WORKING WITH, OF
21 OUR PARTICULAR MINERAL, OUR PARTICULAR TALC INGREDIENTS.

22 Q. BY "EFFECTS OF EXPOSURE", YOU MEAN TO SEE
23 IF THERE WERE ANY HEALTH HAZARDS ASSOCIATED WITH EXPOSURE
24 TO YOUR TALC INGREDIENTS?

25 A. YES.

1 Q. OKAY. WHY DID YOU WANT TO -- DID YOU HAVE
2 SOME DOUBT, IN 1976, AS TO WHETHER OR NOT YOUR TALC
3 PRODUCTS WERE SAFE?

4 A. WE HAVE ALWAYS HAD CONCERN FOR THE HEALTH
5 OF OUR WORKERS, NO MATTER WHAT THEY WERE EXPOSED TO:
6 CHEMICALS OR MINERALS. THIS IS PART OF THE PROGRAM.

7 Q. I AM NOT SURE THAT WAS REALLY RESPONSIVE TO
8 MY QUESTION. MY QUESTION SPECIFICALLY WAS:
9 WERE YOU CONCERNED, IN 1976, AS TO WHETHER
10 OR NOT YOUR TALC WAS SAFE?

11 A. WHAT DO YOU MEAN BY "SAFE"?

12 Q. WELL, WERE YOU CONCERNED THAT EXPOSURE TO
13 YOUR TALC MIGHT BE ASSOCIATED WITH CERTAIN DISEASES?

14 A. NOT SPECIFICALLY DISEASES; WE JUST -- WE
15 WERE -- WE WERE ALWAYS CONCERNED WITH THE HEALTH HAZARDS
16 OF EXPOSURE TO ANY OF OUR CHEMICALS OR DUSTS, AND THIS
17 WAS PART OF OUR PROGRAM.

18 Q. OKAY. WHAT OCCASIONED THIS CONCERN? WHAT
19 OCCASIONED THE CONCERN TO DO THIS STUDY IN 1976?

20 A. THE OCCASION WOULD BE THE COMMENCING OF THE
21 NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH
22 TEAM, THE COMMENCEMENT OF THEIR HEALTH STUDY OF THE
23 VANDERBILT WORKERS OR -- MINERS IN GOUVERNEUR, WHICH
24 STARTED IN 1975.

25 Q. IS THAT THREE COMPANION STUDIES THAT WERE

1 DONE?

2 A. THREE? I DON'T UNDERSTAND YOU.

3 Q. WERE THERE THREE COMPANION STUDIES THAT
4 COMPRISED THIS NIOSH INVESTIGATION OF TALC WORKERS?

5 A. I DON'T EXACTLY KNOW WHAT YOU MEAN BY THAT.

6 Q. WELL, WAS -- WHAT'S YOUR UNDERSTANDING OF
7 WHAT THIS NIOSH STUDY WAS COMPRISED OF?

8 A. IT WAS AN EPIDEMIOLOGICAL STUDY.

9 Q. OKAY. AND THEY WERE STUDYING YOUR WORKERS?

10 A. YES. THE HEALTH OF OUR WORKERS.

11 Q. OKAY. SO YOU MENTIONED THAT IN RESPONSE TO
12 MY QUESTION AS TO WHAT OCCASIONED YOUR CONCERN TO
13 COMMISSION THE SMITH STUDY. WHAT WAS IT ABOUT THE NIOSH
14 STUDY THAT --

15 A. WELL, THEY HAD -- THEY WERE ABOUT TO STUDY;
16 THEY HADN'T COME UP WITH ANY CONCLUSIONS. THIS WAS A --
17 THIS WAS A PARALLEL STUDY, NOT OCCASIONED BY ANY
18 FINDINGS.

19 Q. WAS IT THE SAME TYPE OF STUDY THAT NIOSH
20 WAS DOING?

21 A. NO.

22 Q. OKAY. WHAT EXACTLY WAS THE SMITH STUDY?

23 A. IT INVOLVED THE INJECTION OF ONE OF THE
24 INGREDIENTS, THE MAIN INGREDIENT IN OUR TALC, INTO THE
25 INTRAPLEURAL SPACE OF GOLDEN HAMSTERS.

1 Q. IS THAT MAIN INGREDIENT TREMOLITE?
2 A. YES, IN TWO DIFFERENT CONCENTRATIONS.
3 Q. TWO DIFFERENT DOSES; IS THAT WHAT YOU MEAN?
4 A. THAT'S RIGHT.
5 Q. INTO THE PLEURAL SPACE OF --
6 A. INTRAPLEURAL.
7 Q. INTRAPLEURAL?
8 A. INTRAPLEURAL.
9 Q. NOW, AM I CORRECT IN MY ASSUMPTION THAT
10 NIOSH WAS DOING A GENERAL EPIDEMIOLOGICAL STUDY?
11 A. THEY HAD COMMENCED AN EPIDEMIOLOGICAL STUDY
12 OF THE HEALTH OF THE WORKERS, THE MILLERS AND MINERS THAT
13 MINED IN GOUVERNEUR, NEW YORK.
14 Q. NOW, WHO WAS IT THAT DECIDED TO DO THIS
15 PARTICULAR TYPE OF STUDY, THE STUDY ON HAMSTERS?
16 A. I DID.
17 Q. YOU DID? WHY DID YOU PICK PARTICULARLY
18 THIS TYPE OF STUDY?
19 A. I BECAME AWARE THAT DR. SMITH WAS WORKING
20 IN THIS AREA AND HAD WORKED WITH VARIOUS STUDIES OF
21 ANIMALS, AND I -- AS A RESULT OF WHICH I DECIDED THAT
22 THAT WOULD BE -- FROM HIM, HIS STUDIES, WE COULD GET SOME
23 RESULTS THAT WOULD TELL US SOMETHING ABOUT THE HEALTH
24 HAZARD, IF THERE WAS ONE, INVOLVING EXPOSURES TO OUR
25 TALCS.

1 Q. DID YOU HAVE SOME DOUBT, IN 1975, AS TO
2 WHETHER THERE WAS A HEALTH HAZARD ASSOCIATED WITH
3 EXPOSURE TO YOUR TALCS?

4 A. NO.

5 Q. YOU DID NOT?

6 A. THAT'S RIGHT.

7 Q. OKAY. THEN WHY DID YOU OCCASION -- WHY DID
8 YOU COMMISSION THE STUDY?

9 A. BECAUSE NOT BEING A MEDICAL PERSON, I -- I
10 WOULDN'T -- MY DOUBT OR MY LACK OF DOUBTS WOULDN'T BE
11 WORTH SOMETHING TO RELY UPON, THEREFORE -- THEREFORE, IN
12 ORDER TO SATISFY ANY FUTURE QUESTIONS THAT CAME UP, IF
13 THEY DID COME UP, CONCERNING THE HEALTH HAZARD INVOLVED
14 IN EXPOSURES TO OUR DUST, AT THAT TIME, IT WAS DECIDED
15 THAT SOME DATA OUGHT TO BE GATHERED BY US, AS COMPARED TO
16 THE DATA THAT WAS BEING GATHERED BY SOMEBODY ELSE, IN THE
17 CASE OF THE NIOSH PEOPLE.

18 Q. WERE YOU ANTICIPATING SOME DOUBTS BEING
19 EXPRESSED TO YOU OR ANYONE AT VANDERBILT REGARDING THE
20 HEALTH HAZARDS ASSOCIATED WITH YOUR TALC PRODUCTS?

21 MR. BENDER: THE HEALTH HAZARDS? JUST A MOMENT. I
22 OBJECT TO THE QUESTION AS ASSUMING FACTS NOT IN
23 EVIDENCE. HE TESTIFIED TO THE CONTRARY ABOUT HIS BELIEF
24 IN HEALTH HAZARDS. YOU ASSUMED --

25 MS. EISENSTEIN: I AM NOT TALKING ABOUT THAT,

1 COUNSEL; I AM TALKING ABOUT, DID HE ANTICIPATE THAT HE OR
2 ANYONE AT VANDERBILT WAS GOING TO FIND THEMSELVES IN A
3 POSITION WHERE PEOPLE WERE EXPRESSING DOUBTS REGARDING
4 THE HEALTH HAZARDS -- OR EXPRESSING THE FACT THAT THEY
5 THOUGHT THERE WERE HEALTH HAZARDS ASSOCIATED WITH
6 VANDERBILT TALC PRODUCTS.

7 THE WITNESS: AT THAT TIME, I DIDN'T ANTICIPATE
8 THEM.

9 BY MS. EISENSTEIN:

10 Q. YOU DIDN'T?

11 A. (WITNESS NODS HEAD.)

12 MR. BENDER: HE JUST SAID THAT, COUNSEL.

13 BY MS. EISENSTEIN:

14 Q. SO YOU DIDN'T HAVE ANY DOUBTS REGARDING
15 HEALTH -- THE SAFETY OF YOUR PRODUCT? YOU BELIEVED YOUR
16 PRODUCT WAS SAFE; IS THAT RIGHT?

17 A. YES, I DID.

18 Q. AND IF YOU DIDN'T ANTICIPATE ANY DOUBTS AS
19 TO THE SAFETY OF YOUR PRODUCT, YOUR TALC PRODUCTS BEING
20 RAISED BY ANYBODY ELSE, THEN WHY DID YOU COMMISSION THE
21 STUDY?

22 A. OH. TO HAVE THAT INFORMATION IN CASE MY
23 ANTICIPATIONS WERE WRONG.

24 Q. BUT AS OF 1975 --

25 MR. BENDER: EXCUSE ME. ANY TIME YOU START A

1 QUESTION WITH "BUT", IT'S ARGUMENTATIVE, AND I WOULD LIKE
2 YOU TO DELETE THAT FROM YOUR QUESTION, PLEASE.

3 BY MS. EISENSTEIN:

4 Q. IN 1975, HAD ANYONE COME TO YOU AND
5 EXPRESSED DOUBTS REGARDING HEALTH HAZARDS ASSOCIATED WITH
6 YOUR TALC PRODUCTS?

7 A. IN 1975?

8 Q. OR PRIOR.

9 A. I CAN'T REMEMBER.

10 Q. OKAY. AND DO YOU HAVE ANY UNDERSTANDING AS
11 TO WHY NIOSH HAD DECIDED TO DO A STUDY ON YOUR TALC
12 PRODUCTS?

13 A. I REALLY DON'T KNOW WHY THEY DID THAT.

14 Q. WAS THIS SMITH STUDY THE FIRST STUDY EVER
15 COMMISSIONED BY VANDERBILT REGARDING POSSIBLE HEALTH
16 HAZARDS ASSOCIATED WITH TALC PRODUCTS?

17 A. YES.

18 Q. OKAY. AND THAT WAS IN APPROXIMATELY 1975,
19 WHEN IT WAS COMMISSIONED; RIGHT?

20 A. NO. I THINK I SAID 1976, BUT --

21 Q. I THINK YOU DID, SIR.

22 A. -- BUT THAT WAS AN APPROXIMATION.

23 Q. RIGHT.

24 WHEN DID YOU FIRST MEET DR. SMITH?

25 ACTUALLY, DID YOU EVER MEET HIM PERSONALLY?

1 A. YES.

2 Q. OKAY. WHEN DID YOU FIRST MEET HIM?

3 A. APPROXIMATELY A YEAR OR TWO BEFORE WE
4 COMMISSSIONED THE STUDY.

5 Q. WHERE DID YOU MEET HIM?

6 A. IN HIS OFFICE.

7 Q. YOU WENT TO SEE HIM?

8 A. YES.

9 Q. SO THIS WAS IN APPROXIMATELY 1973?

10 A. IT COULD BE -- LET'S SEE. DID I SAY --
11 IT'S TOO HARD FOR ME TO REMEMBER THE DATES, REALLY. I
12 JUST DON'T --

13 Q. BUT IT WAS SOMETIME BEFORE THE STUDY WAS
14 COMMISSSIONED?

15 A. YES, OF COURSE.

16 Q. IT WAS ABOUT A YEAR BEFORE, AT LEAST?

17 A. APPROXIMATELY.

18 Q. AND WHY DID YOU GO TO HIS OFFICE TO MEET
19 HIM?

20 A. BECAUSE I WANTED TO DISCUSS THE STUDY WITH
21 HIM. I WANTED TO DISCUSS SOME PREVIOUS STUDIES THAT HE
22 HAD DONE IN THIS AREA.

23 Q. HOW DID YOU COME TO FIND OUT ABOUT THE
24 PREVIOUS STUDIES THAT HE HAD DONE IN THIS AREA?

25 A. I DON'T REMEMBER.

1 Q. HAD SOMEONE SHOWED THEM TO YOU?

2 A. THE STUDY THAT HE HAD DONE ARRIVED ON MY
3 DESK; I CAN'T REMEMBER HOW IT GOT THERE.

4 Q. SIR, IS THERE A MEDICAL DIRECTOR AT
5 VANDERBILT?

6 A. NO.

7 Q. IS THERE ANYONE IN CHARGE OF SAFETY OF THE
8 MINERS AT VANDERBILT?

9 A. YES.

10 Q. WHO WOULD THAT BE?

11 A. THAT WOULD BE MR. IRVING; AND THE MANAGER
12 OF THE GOUVERNEUR FACILITY.

13 Q. NOW, HOW LONG HAS HE BEEN MANAGER OF THE
14 GOUVERNEUR FACILITY?

15 A. TEN OR FIFTEEN YEARS.

16 Q. OKAY. DID YOU EVER ENTER INTO ANY
17 DISCUSSIONS WITH MR. IRVING REGARDING THE NEED TO DO A
18 STUDY?

19 A. ABOUT THIS HAMSTER STUDY?

20 Q. THIS HAMSTER STUDY.

21 A. NO.

22 Q. NO? HAVE YOU EVER HAD ANY CONVERSATIONS
23 WITH HIM REGARDING THE SMITH STUDY?

24 A. I CAN'T REMEMBER.

25 Q. DO YOU KNOW WHETHER OR NOT MR. IRVING, ONE

1 OF HIS -- IF ONE OF HIS RESPONSIBILITIES WAS TO STAY
2 ABREAST OF THE MEDICAL LITERATURE CONCERNING EXPOSURE TO
3 TALC?

4 A. I DON'T KNOW WHAT HIS DUTIES WERE IN THAT
5 REGARD.

6 Q. OKAY. DO YOU KNOW WHETHER THERE WAS
7 ANYONE, EVER, AT VANDERBILT, WHO HAD THE RESPONSIBILITY
8 OF KEEPING ABREAST WITH THE MEDICAL LITERATURE REGARDING
9 EXPOSURE TO TALC?

10 A. I DON'T KNOW.

11 Q. OKAY. YOU MENTIONED AN INDUSTRIAL
12 HYGIENIST THAT IS EMPLOYED AT THIS TIME BY VANDERBILT
13 JUST A MOMENT AGO.

14 A. YES.

15 Q. WHAT WAS HIS NAME?

16 A. JOHN KELSE, K-E-L-S-E.

17 Q. AND HE HAS BEEN EMPLOYED FOR LESS THAN TWO
18 YEARS?

19 A. YES.

20 Q. WAS THERE AN INDUSTRIAL HYGIENIST BEFORE
21 HIM?

22 A. NO.

23 Q. SO THE FIRST TIME VANDERBILT EVER EMPLOYED
24 AN INDUSTRIAL HYGIENIST WOULD HAVE BEEN IN 1984 OR 1985?

25 A. YES.

1 Q. OKAY. WHAT ARE MR. KELSE'S DUTIES?

2 A. AS AN INDUSTRIAL HYGIENIST, HIS DUTIES ARE
3 TO VISIT THE VARIOUS MANUFACTURING AND MINING SITES, AND
4 TO ASSURE THAT THE PROPER INDUSTRIAL HYGIENE IS OBSERVED
5 AT THOSE VARIOUS SITES.

6 Q. PRIOR TO HIS COMING TO WORK FOR VANDERBILT,
7 DID ANYONE HAVE THAT SAME RESPONSIBILITY BUT WAS NOT
8 CALLED AN INDUSTRIAL HYGIENIST?

9 A. NO.

10 Q. DID VANDERBILT EVER EMPLOY AN OUTSIDE
11 ENTITY IN ORDER TO FULFILL THE DUTIES THAT MR. KELSE NOW
12 HAS?

13 A. THE INSURANCE COMPANY WHO INSURED US SENT
14 AN INDUSTRIAL HYGIENIST, AS -- PART OF THE INSURANCE WAS
15 FOR AN INDUSTRIAL HYGIENIST TO VISIT ALL OUR PLANTS AT
16 CERTAIN TIMES OF THE YEAR, TO DO HIS INDUSTRIAL HYGIENE
17 SURVEYS.

18 Q. AND WHAT INSURANCE COMPANY WOULD THAT BE,
19 SIR?

20 A. HARTFORD.

21 Q. AND DO YOU KNOW THE NAME OF THE INDUSTRIAL
22 HYGIENIST SENT?

23 A. YES.

24 Q. WHO WOULD THAT HAVE BEEN?

25 A. JOHN KELSE.

1 Q. AND PRIOR TO BECOMING A FULL -- IS JOHN
2 KELSE NOW A FULL-TIME EMPLOYEE WITH VANDERBILT?

3 A. YES.

4 Q. PRIOR TO BECOMING A FULL-TIME EMPLOYEE WITH
5 VANDERBILT, WAS HE WORKING FOR HARTFORD?

6 A. YES.

7 Q. AND FOR HOW LONG, PRIOR TO COMING TO WORK
8 FOR VANDERBILT, DID HE SERVE THESE FUNCTIONS OF DOING
9 THESE SURVEYS?

10 A. APPROXIMATELY FOUR TO FIVE YEARS.

11 Q. SO SINCE APPROXIMATELY 1980, 1979?

12 A. I SAID APPROXIMATELY FOUR OR FIVE YEARS.

13 Q. OKAY. PRIOR TO HIS SURVEYS, DID VANDERBILT
14 HAVE ANYONE THAT CONDUCTED SURVEYS REGARDING THE HEALTH
15 AND SAFETY OF THE TALC MINERS?

16 A. I DON'T KNOW.

17 Q. DO YOU KNOW WHETHER VANDERBILT EVER
18 REGULARLY DID MEDICAL EXAMINATIONS OF ITS TALC EMPLOYEES?

19 A. YES, I DO KNOW.

20 Q. DID THEY?

21 A. YES.

22 Q. AND HOW LONG HAS VANDERBILT BEEN DOING
23 THOSE?

24 A. TO MY KNOWLEDGE, SINCE THEY OPENED THE MINE
25 IN 1948.

1 Q. WHO WAS DOING THOSE EXAMINATIONS?

2 A. LOCAL DOCTORS, WHOSE NAMES I DON'T KNOW,
3 AND THE LOCAL -- IN CONJUNCTION WITH A LOCAL HOSPITAL,
4 THE PERSONNEL OF THE LOCAL HOSPITAL.

5 Q. WAS THERE SOMEONE AT VANDERBILT WHO WAS
6 RESPONSIBLE FOR OVERSEEING THIS MEDICAL PROGRAM?

7 A. WHEN? WHAT TIME FRAME ARE YOU TALKING
8 ABOUT?

9 Q. ANY TIME FRAME.

10 A. WELL, TODAY, THE INDUSTRIAL HYGIENIST, MR.
11 KELSE, WOULD BE OVERSEEING THAT, TO A CERTAIN EXTENT.

12 Q. RIGHT. WELL, YOU STATED THAT SINCE
13 VANDERBILT OPENED -- WHEN DID THEY OPEN?

14 A. 1948.

15 Q. OKAY. -- THAT THERE HAVE BEEN REGULAR
16 MEDICAL SURVEYS DONE -- I MEAN MEDICAL EXAMINATIONS DONE
17 OF ITS EMPLOYEES?

18 A. MEDICAL EXAMINATIONS DONE OF THE EMPLOYEES.

19 Q. OKAY. ARE THERE RECORDS KEPT OF THOSE
20 MEDICAL EXAMINATIONS?

21 A. I DON'T KNOW.

22 Q. IF YOU WANTED TO FIND OUT IF THERE WERE
23 RECORDS KEPT TODAY, WHERE WOULD YOU GO?

24 A. I WOULD GO TO MR. ERDMAN.

25 Q. OKAY. DO YOU KNOW OF ANYONE AT VANDERBILT

1 THAT HAS KEPT ANY RECORDS REGARDING MEDICAL STUDIES DONE
2 ON TALC WORKERS?

3 A. YES.

4 Q. WHO WOULD HAVE DONE THAT?

5 A. MR. KELSE.

6 Q. OKAY. WHAT ABOUT MEDICAL EXAMINATIONS,
7 RECORDS OF MEDICAL EXAMINATIONS?

8 A. WELL, DIDN'T YOU JUST --

9 Q. OKAY. I ACTUALLY SAID MEDICAL STUDIES,
10 WHICH COULD BE INTERPRETED AS SOMETHING DIFFERENT.

11 A. OH. I WOULD HAVE THE MEDICAL STUDIES.

12 Q. OKAY. YOU WOULD BE THE ONE TO GO TO IF YOU
13 WANTED TO FIND MEDICAL STUDIES ON THE TALC WORKERS?

14 A. ON OUR TALC WORKERS?

15 Q. YES.

16 A. YES.

17 Q. WOULD ANYONE ELSE AT VANDERBILT --

18 A. SURE.

19 Q. -- HAVE THOSE --

20 A. MR. KELSE, MR. VANDERBILT, MR. RIEGER.

21 Q. I THINK THERE'S MORE THAN ONE MR.
22 VANDERBILT; RIGHT?

23 A. THERE'S A PAUL VANDERBILT.

24 Q. WHICH MR. VANDERBILT WOULD HAVE --

25 A. PAUL.

1 Q. PAUL?

2 A. OR MR. RIEGER.

3 Q. MR. THOMPSON, WOULD HE HAVE THEM?

4 A. HE MAY.

5 Q. DID YOU EVER DISCUSS THE COMMISSIONING OF
6 THE SMITH STUDY WITH MR. THOMPSON?

7 A. YES.

8 Q. CAN YOU REMEMBER THE FIRST TIME YOU HAD A
9 DISCUSSION WITH MR. THOMPSON ABOUT COMMISSIONING THE
10 STUDY?

11 A. NO, I CAN'T.

12 Q. CAN YOU RELATE TO ME THE SUBSTANCE OF YOUR
13 CONVERSATION WITH MR. THOMPSON REGARDING THE
14 COMMISSIONING OF THE STUDY?

15 A. IT WAS SOMETHING TO DO -- IT WAS SOMETHING
16 TO DO WITH EASE OF ISOLATING THE TREMOLITE IN THE -- IN
17 THE TALC THAT THEY WERE MAKING, AND WHETHER THAT COULD BE
18 DONE.

19 Q. THAT IS THE ONLY -- HOW MANY CONVERSATIONS
20 HAVE YOU HAD WITH MR. THOMPSON REGARDING THAT STUDY?

21 A. I HAVE NO IDEA.

22 Q. WOULD THERE HAVE BEEN MORE THAN ONE?

23 A. YES.

24 Q. OKAY. WERE THEY ALL CONCERNING THE EASE OF
25 ISOLATING THE TREMOLITE FROM THE TALC?

1 A. I DON'T KNOW.

2 Q. DID YOU AND MR. THOMPSON EVER HAVE ANY
3 DISCUSSIONS REGARDING YOUR REASONS FOR WANTING TO
4 COMMISSION THIS STUDY?

5 A. I DON'T REMEMBER.

6 Q. IF YOU HAD WANTED, IN 1975, TO COMMISSION A
7 STUDY, WOULD YOU HAVE HAD THE AUTHORITY TO DO IT
8 YOURSELF?

9 A. I DON'T KNOW; IT'S TOO HARD TO REMEMBER
10 BACK -- THAT FAR BACK.

11 Q. I THINK YOU STATED THAT YOU DID, IN FACT,
12 MAKE THE DECISION, DIDN'T YOU, TO COMMISSION THE SMITH
13 STUDY?

14 A. I DID.

15 Q. DID ANYBODY ELSE PARTICIPATE IN MAKING THAT
16 DECISION WITH YOU?

17 A. I DON'T REMEMBER.

18 Q. OKAY. KNOWING, AS YOU SIT HERE TODAY, WHAT
19 YOUR DUTIES WERE, AND YOUR FUNCTION OR POWER WITHIN THE
20 COMPANY AT THAT TIME, COULD YOU HAVE COMMISSIONED THE
21 STUDY WITHOUT SPEAKING TO ANYBODY ELSE?

22 A. I DON'T THINK SO.

23 Q. OKAY. SO YOU PROBABLY WOULD HAVE HAD TO
24 HAVE TALKED TO SOMEONE ELSE REGARDING IT?

25 A. PROBABLY.

1 Q. WHO DO YOU THINK, AS YOU SIT HERE TODAY,
2 WOULD HAVE HAD TO HAVE GIVEN YOU THE OKAY IN ORDER TO
3 COMMISSION THAT STUDY?

4 A. I CAN'T -- I WOULD -- I CAN'T REMEMBER AT
5 THAT TIME; TOO FAR BACK.

6 Q. WOULD YOU HAVE HAD TO HAVE GOTTEN IT FROM
7 MR. VANDERBILT, SR.?

8 A. I DON'T KNOW.

9 Q. DID MR. IRVING PARTICIPATE IN THE DECISION
10 TO SPONSOR THAT -- TO COMMISSION THAT STUDY?

11 A. I DON'T THINK SO.

12 Q. WAS HE EVER MADE AWARE THAT THAT STUDY WAS
13 GOING TO BE CONDUCTED?

14 A. I DON'T KNOW.

15 Q. YOU SAID THAT YOU WENT TO THE OFFICES OF
16 DR. SMITH?

17 A. YES.

18 Q. DID YOU HAVE A PHONE CONVERSATION WITH HIM
19 PRIOR TO THAT TIME?

20 A. I DON'T REMEMBER.

21 Q. DO YOU THINK YOU HAD ANY CORRESPONDENCE
22 WITH HIM?

23 A. I DON'T REMEMBER THAT EITHER.

24 Q. DID YOU HAVE ANY COMMUNICATION WITH HIM
25 PRIOR TO GOING TO HIS OFFICE THAT DAY?

1 A. I CAN'T REMEMBER.

2 Q. WOULD IT HAVE BEEN YOUR PRACTICE TO DROP BY
3 ON SOMEONE UNANNOUNCED?

4 A. NO.

5 Q. OKAY. SO GIVEN THAT, WOULD YOU ASSUME, AS
6 YOU SIT HERE TODAY, THAT YOU PROBABLY COMMUNICATED WITH
7 HIM PRIOR TO THAT TIME?

8 MR. BENDER: YOU ARE ASKING HIM TO SPECULATE, AND
9 HE HAS ALREADY TOLD YOU THAT HE DOESN'T REMEMBER.

10 MS. EISENSTEIN: I AM NOT ASKING HIM TO SPECULATE;
11 I AM ASKING HIM TO BASE IT ON HIS KNOWLEDGE OF HOW HE
12 CONDUCTS BUSINESS. THAT'S WHAT I AM ASKING.

13 MR. BENDER: DO NOT ANSWER THAT QUESTION.

14 BY MS. EISENSTEIN:

15 Q. HOW MUCH DID VANDERBILT PAY TO DR. SMITH TO
16 DO THIS STUDY?

17 A. I DON'T REMEMBER THAT NOW.

18 Q. IF YOU WANTED TO FIND OUT HOW MUCH
19 VANDERBILT PAID FOR THAT STUDY TODAY, WHERE WOULD YOU GO?

20 A. I WOULD GO TO THE TREASURER.

21 Q. WHO IS THE TREASURER, SIR?

22 A. I DON'T KNOW.

23 Q. YOU WOULD GO TO THE CURRENT TREASURER?

24 A. WHOEVER IS THE TREASURER TODAY.

25 Q. DID YOU EVER HAVE ANY DISCUSSIONS WITH DR.

1 SMITH REGARDING HOW MUCH HIS FEE WOULD BE FOR DOING THIS
2 STUDY?

3 A. YES.

4 Q. YOU DID, PERSONALLY?

5 A. YES.

6 Q. COULD YOU TELL ME WHAT THOSE DISCUSSIONS --

7 A. WE JUST ASKED HIM HOW MUCH IT WOULD BE.

8 Q. AND HE STATED A FIGURE?

9 A. HE STATED A FIGURE.

10 Q. OKAY. WAS THAT FIGURE IN THE TENS OF
11 THOUSANDS OF DOLLARS?

12 A. I DON'T REMEMBER.

13 Q. DO YOU HAVE ANY APPROXIMATION?

14 A. NO, I DON'T.

15 Q. OKAY. WHEN YOU WENT TO MR. SMITH'S OFFICES
16 THAT DAY, DID YOU TELL HIM -- WHAT DID YOU TELL HIM?

17 A. I CAN'T REMEMBER.

18 Q. OKAY. DID YOU GO THERE ALREADY WITH A
19 NOTION IN YOUR MIND OF WHAT TYPE OF STUDY YOU WANTED
20 CONDUCTED?

21 A. YES.

22 Q. DID YOU KNOW, SPECIFICALLY, THAT YOU WANTED
23 A STUDY THAT WOULD INJECT TREMOLITE TALC INTO THE
24 INTRAPLEURAL SPACES OF HAMSTERS?

25 A. TREMOLITE, NOT TREMOLITE TALC.

1 Q. I'M SORRY.

2 A. YES, I HAD THAT IN MIND.

3 Q. OKAY. HOW HAD YOU COME UP WITH THAT

4 PARTICULAR TYPE OF STUDY?

5 A. AS I SAID BEFORE, ON MY DESK, BY A MEANS
6 THAT I DON'T KNOW ABOUT, ARRIVED A COPY OF DR. SMITH'S --
7 ONE OF DR. SMITH'S STUDIES WITH HAMSTERS, INVOLVING
8 INTRAPLEURAL INJECTIONS OF VARIOUS SUBSTANCES INTO THE
9 HAMSTERS. I -- TO DETERMINE WHAT THE BIOLOGICAL EFFECT
10 WOULD BE.

11 I FIGURED THAT THAT WOULD BE A GOOD THING
12 FOR US TO DO, SO THAT -- I APPROACHED HIM ON THAT BASIS.

13 Q. AT THE TIME THAT YOU APPROACHED HIM --
14 STRIKE THAT.

15 AT THE TIME THAT HIS STUDY APPEARED ON YOUR
16 DESK, HAD YOU EVER HEARD, FROM ANY SOURCE, THAT THERE WAS
17 A RISK OF CANCER ASSOCIATED WITH EXPOSURE TO YOUR
18 TREMOLITE TALC?

19 A. I CAN'T REMEMBER BACK THEN.

20 Q. OKAY. WAS PART OF THE FOCUS OF THIS STUDY
21 TO DETERMINE WHETHER THERE WAS A RISK OF CANCER?

22 A. YES.

23 Q. DO YOU HAVE AN UNDERSTANDING OF WHAT THE
24 CONCLUSION OF THE STUDY WAS?

25 A. I KNOW WHAT THE CONCLUSIONS WERE.

1 Q. WHAT WERE THE CONCLUSIONS?

2 A. THERE WAS NO RISK OF CANCER FROM THIS
3 MATERIAL INJECTED INTO THESE HAMSTERS.

4 Q. OKAY.

5 A. AS A RESULT OF THE INJECTION, NO -- NO
6 CANCERS WERE DEVELOPED.

7 Q. OKAY. WAS THE FOCUS OF THE STUDY TO
8 DETERMINE THAT SPECIFIC TYPE OF RISK, CANCER?

9 A. YES.

10 Q. OKAY. THE FOCUS WAS NOT -- WAS THAT THE
11 SPECIFIC FOCUS?

12 A. YES.

13 Q. OKAY. SO SOMETIME PRIOR TO GOING TO SEE
14 DR. SMITH, YOU HAD DETERMINED THAT YOU WANTED A STUDY
15 THAT WOULD DETERMINE IF THERE WAS A RISK CONCERNING
16 CANCER, REGARDING --

17 A. I DON'T REMEMBER THAT.

18 Q. IF YOU WOULD BE GOOD ENOUGH TO JUST LET ME
19 FINISH MY SENTENCE -- I KNOW IT'S MY QUESTIONS, AND I
20 KNOW IT'S HARD.

21 MR. BENDER: YOU HESITATED, AND THAT'S WHY HE
22 THOUGHT -- HE JUMPED IN.

23 BY MS. EISENSTEIN:

24 Q. AT SOMETIME PRIOR TO GOING TO SEE DR. SMITH
25 AT HIS OFFICES, YOU HAD DETERMINED THAT YOU WANTED A

1 STUDY THAT WOULD FOCUS ON WHETHER OR NOT THERE WAS A RISK
2 OF CANCER ASSOCIATED WITH EXPOSURE TO YOUR TALC -- TO
3 YOUR TREMOLITE?

4 A. ONLY AFTER I SAW HIS -- HIS STUDY THAT I
5 GOT -- I GOT THAT IDEA IN MY HEAD.

6 Q. OKAY. SO -- BUT IT IS CORRECT, THOUGH,
7 THAT YOU HAD THAT IDEA IN YOUR HEAD WHEN YOU WENT TO DR.
8 SMITH?

9 A. YES, AS A RESULT OF LOOKING AT HIS STUDY
10 AND DETERMINING THAT I WOULD LIKE TO SEE THE SAME SORT OF
11 STUDY ON OUR TALC.

12 Q. THAT STUDY THAT YOU SAW ON YOUR DESK, DID
13 IT REGARD TALC?

14 A. YES. ONE -- ONE OF THE PRODUCTS WAS TALC.
15 ONE OF THE MATERIALS USED WAS TALC.

16 Q. OKAY. WHERE WAS THAT TALC FROM; DO YOU
17 KNOW?

18 A. GOUVERNEUR, NEW YORK.

19 Q. THE SAME AREA WHERE YOUR TALC WAS MINED?

20 A. YES.

21 Q. OKAY. IN 1975, HOW MANY TALC MINES WERE
22 THERE IN GOURVERNEUR, NEW YORK?

23 A. ONE.

24 Q. THERE WAS ONE MINE?

25 A. WELL, OKAY. LET ME BACK UP. DO YOU MEAN

1 -- DO YOU WANT COMPANIES? THERE WAS MORE THAN ONE MINE;
2 THERE'S ONE COMPANY.

3 Q. WHAT COMPANY WOULD THAT HAVE BEEN?

4 A. THE R.T. VANDERBILT COMPANY.

5 Q. OKAY. SO HIS PRIOR STUDY WAS ON TREMOLITE
6 TALC TAKEN FROM YOUR MINE; IS THAT CORRECT?

7 A. NO.

8 Q. WELL, YOU JUST TOLD ME THAT IT WAS FROM --
9 FROM THAT AREA, AND THAT IT WAS THAT AREA THAT THE TALC
10 CAME FROM, AND THAT YOU WERE THE ONLY COMPANY, AT THAT
11 TIME, MINING.

12 A. YES, BUT THE STUDY WAS DONE MANY YEARS
13 BEFORE THAT, WHEN THERE WAS ANOTHER COMPANY THERE.

14 Q. DO YOU KNOW WHAT YEAR THE EARLIER STUDY WAS
15 DONE?

16 A. APPROXIMATELY 1959.

17 Q. WAS THE FOCUS OF THAT STUDY TO DETERMINE
18 WHETHER OR NOT THERE WAS A CANCER RISK ASSOCIATED WITH
19 THE TALC FROM THAT PARTICULAR AREA?

20 A. YES.

21 Q. AND THAT WAS A 1959 STUDY?

22 A. YES.

23 Q. WHEN, SIR, WAS THE NEXT STUDY DONE ON --
24 WHEN WAS THE NEXT STUDY COMMISSIONED BY VANDERBILT
25 REGARDING EXPOSURE TO ITS TALC PRODUCTS?

1 A. APPROXIMATELY 1975.

2 Q. THAT IS A DIFFERENT STUDY THAN THE SMITH
3 STUDY WE WERE JUST DISCUSSING?

4 A. YES.

5 Q. OKAY.

6 MR. SIMON: LET'S GO OFF THE RECORD FOR A SECOND.

7 (DISCUSSION ENSUED OFF THE RECORD.)

8 (THE LUNCH BREAK WAS TAKEN AT THIS TIME.)

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ALLEN MORGAN HARVEY

CALLED AS A WITNESS, HAVING BEEN PREVIOUSLY
SWORN, WAS EXAMINED AND TESTIFIED FURTHER AS
FOLLOWS:

EXAMINATION(CONTINUED)

BY MS. EISENSTEIN:

Q. LET'S GO BACK ON THE RECORD.

YOU REALIZE, SIR, THAT YOU ARE STILL UNDER
OATH; RIGHT?

A. YES.

Q. OKAY. JUST FOR CLARIFICATION, WAS THE
SMITH STUDY THE FIRST STUDY EVER COMMISSIONED BY
VANDERBILT?

A. TO THE BEST OF MY KNOWLEDGE, IT WAS.

Q. OKAY. DID YOU SAY THERE WAS ANOTHER STUDY,
A SECOND STUDY, COMMISSIONED IN 1975?

A. BY WHOM?

Q. BY VANDERBILT.

A. YES.

Q. AND WHO WAS COMMISSIONED TO DO THAT STUDY?

A. DR. TABERSHAW.

Q. OKAY. IS DR. TABERSHAW A MEDICAL DOCTOR?

1 A. YES.

2 Q. OKAY. WHAT ARE HIS CREDENTIALS; DO YOU
3 KNOW?

4 A. HE'S BEEN IN OCCUPATIONAL MEDICINE FOR
5 MANY, MANY YEARS. AT ONE TIME, HE WAS THE DIRECTOR OF
6 THE NEW YORK STATE DEPARTMENT OF INDUSTRIAL HYGIENE, AND
7 HE HAS BEEN IN THE CONSULTING BUSINESS WITH HIS OWN FIRM
8 MOST OF THE TIME, FOR A GOOD TWENTY, MAYBE THIRTY YEARS.

9 Q. WHEN YOU SAY TWENTY OR THIRTY YEARS, DO YOU
10 MEAN FROM TODAY'S DATE, OR FROM THE TIME OF 1975?

11 A. NO. IN TOTAL; BECAUSE HE'S RETIRED NOW.

12 Q. HE IS? DO YOU KNOW WHERE HE LIVES NOW?

13 A. I DON'T.

14 Q. DO YOU KNOW WHAT STATE?

15 A. I DON'T KNOW WHERE HE LIVES. HE LIVED IN
16 ARIZONA WHEN I LAST HEARD ABOUT HIM, BUT I DON'T KNOW IF
17 HE IS STILL THERE.

18 Q. AND WHEN WAS THE LAST TIME YOU SPOKE WITH
19 HIM?

20 A. PROBABLY THREE TO FIVE YEARS AGO.

21 Q. AND WHAT WAS THE SUBSTANCE OF YOUR LAST
22 CONVERSATION WITH HIM?

23 A. I DON'T KNOW.

24 Q. WHEN WAS THE FIRST TIME YOU MET DR.
25 TABERSHAW?

1 A. APPROXIMATELY 1975, PLUS OR MINUS A YEAR.

2 Q. HOW DID YOU FIRST BECOME AWARE OF HIM?

3 A. I DON'T REMEMBER HOW I FIRST BECAME AWARE
4 OF HIM.

5 Q. DO YOU REMEMBER WHAT YOUR FIRST CONTACT
6 WITH HIM WAS?

7 A. YES.

8 Q. WHAT WAS THAT?

9 A. I CONTACTED HIM FOR THE EXPRESS PURPOSE OF
10 HAVING HIM RUN AN EPIDEMIOLOGICAL STUDY OF THE WORKERS,
11 HEALTH STUDY OF THE WORKERS AT THE VANDERBILT COMPANY'S
12 GOUVERNEUR MINE.

13 Q. I'M SORRY; WHAT COMPANIES? I DIDN'T HEAR
14 THAT.

15 A. AT THE VANDERBILT COMPANY'S GOUVERNEUR
16 MINE; THAT'S THE GOUVERNEUR TALC COMPANY.

17 Q. JUST FOR MY OWN CLARIFICATION, IS
18 VANDERBILT A SUBSIDIARY OF GOUVERNEUR TALC COMPANY, OR --

19 A. NO. THE OTHER WAY AROUND.

20 Q. THE OTHER WAY AROUND? OKAY.

21 HAD YOU DETERMINED WHAT TYPE OF STUDY YOU
22 WANTED CONDUCTED PRIOR TO CONTACTING HIM?

23 A. YES.

24 Q. AND HOW HAD YOU ARRIVED AT THAT
25 DETERMINATION?

1 A. I HAD TALKED WITH A PERSON IN THE NIOSH
2 ORGANIZATION, AND I WON'T GO THROUGH -- YOU GOT WHAT
3 NIOSH MEANS, DON'T YOU? THAT'S THE NATIONAL INSTITUTE OF
4 OCCUPATIONAL SAFETY AND HEALTH. I DON'T WANT TO SAY THAT
5 EVERYTIME.

6 I HAD TALKED TO A PERSON IN THE NIOSH
7 ORGANIZATION ABOUT WHAT KIND OF STUDY THEY HAD PLANNED
8 FOR OUR GTC OPERATIONS, THE GOUVERNEUR TALC COMPANY
9 OPERATIONS, SO THEREFORE, I KNEW WHAT KIND OF STUDY I
10 WANTED -- OR WE WOULD WANT DR. TABERSHAW TO DO.

11 MS. EISENSTEIN: LET'S GO OFF THE RECORD FOR A
12 SECOND.

13 (DISCUSSION ENSUED OFF THE RECORD.)

14 MS. EISENSTEIN: LET'S GO BACK ON THE RECORD.

15 Q. YOU JUST STATED A MOMENT AGO, SIR, THAT YOU
16 SPOKE WITH SOMEONE FROM NIOSH REGARDING THEIR STUDY?

17 A. YES.

18 Q. WHEN WAS THE FIRST TIME YOU LEARNED THAT
19 NIOSH WANTED TO DO A STUDY OF YOUR TALC MINERS?

20 A. OH, APPROXIMATELY 1975.

21 Q. DID SOMEONE FROM NIOSH APPROACH ANYONE AT
22 VANDERBILT?

23 A. YES, THEY DID.

24 Q. WHO DID THEY APPROACH?

25 A. I DON'T REMEMBER EXACTLY WHO THEY

1 APPROACHED.

2 Q. WERE YOU APPROACHED?

3 A. I DON'T REMEMBER WHETHER IT WAS ME OR
4 SOMEONE ELSE IN THE COMPANY AT THE TIME.

5 Q. OKAY. WHO WAS IT THAT YOU SPOKE TO FROM
6 NIOSH?

7 A. A FELLOW NAMED JON, J-O-N, MAY, DR. JON
8 MAY.

9 Q. AND WHAT DID DR. MAY TELL YOU?

10 A. HE ASKED ME IF OUR COMPANY WOULD AGREE TO A
11 STUDY, AN EPIDEMIOLOGICAL STUDY OF OUR TALC WORKERS AT
12 THE GOUVERNEUR OPERATION.

13 Q. AND WHAT DID YOU SAY?

14 A. I TOLD HIM, AT THE TIME, THAT -- WHEN I
15 FIRST TALKED WITH HIM, THAT I WOULD HAVE TO RELAY THAT TO
16 OUR MANAGEMENT, AND THAT I COULDN'T MAKE THAT DECISION.

17 Q. DID YOU RELAY IT TO YOUR MANAGEMENT?

18 A. I DID.

19 Q. WHO IN YOUR MANAGEMENT?

20 A. THE ONES I MENTIONED BEFORE, THAT WOULD BE
21 ON THE STAFF. THAT WOULD BE MR. VANDERBILT SR., MR.
22 FIEDERLEIN, MR. NOLAND, MR. --

23 THAT SOUNDS ABOUT RIGHT, AT THE TIME.

24 Q. DID ANYONE OBJECT TO THE NIOSH STUDY BEING
25 DONE?

1 A. NOT TO MY KNOWLEDGE.

2 Q. DID YOU SUBSEQUENTLY GET IN CONTACT WITH
3 JON MAY?

4 A. YES. I HAD SEVERAL CONVERSATIONS WITH JON
5 AFTER HE MADE THAT FIRST INITIAL REQUEST.

6 Q. WERE YOU THE LIAISON BETWEEN NIOSH AND THE
7 COMPANY?

8 A. YES. YES, I WAS.

9 Q. SO IF THEY WANTED TO MAKE ANY SORT OF
10 ARRANGEMENTS, THEY HAD CONTACTS WITH YOU?

11 A. YES.

12 Q. HOW LONG DID THEIR STUDY TAKE?

13 A. FROM THEIR INCEPTION UNTIL THE TIME THEIR
14 STUDY WAS PUBLISHED, IT WAS FIVE YEARS.

15 Q. SO FROM 1975 TO 1980?

16 A. YES.

17 Q. WHAT WAS YOUR UNDERSTANDING AS TO WHY THEY
18 WANTED TO DO THE STUDY?

19 A. AS I SAID BEFORE, I NEVER KNEW EXACTLY WHY
20 THEY WANTED TO DO THAT STUDY, AND THEY DIDN'T TELL ME.

21 Q. JON MAY NEVER EXPRESSED TO YOU ANY REASONS
22 WHY NIOSH WAS INTERESTED IN DOING THAT STUDY?

23 A. WELL, IF HE DID, I HAVE FORGOTTEN WHAT THEY
24 WERE.

25 Q. WAS IT DURING THAT SAME YEAR THAT

1 VANDERBILT COMMISSSIONED DR. TABERSHAW TO DO A STUDY?

2 A. YES.

3 Q. OKAY. NOW, WHY WAS THE TABERSHAW STUDY
4 COMMISSSIONED?

5 A. THE REASON FOR THE TABERSHAW DECISION WAS
6 BECAUSE WE DIDN'T KNOW -- WE WEREN'T FAMILIAR WITH THE
7 PEOPLE FROM NIOSH, AND WE WEREN'T TOO SURE THAT THEY
8 WOULD DO AN ACCURATE STUDY, AND THE ONLY WAY TO BE
9 ASSURED WAS TO HAVE OUR OWN COMMISSSIONED -- OUR OWN
10 STUDY.

11 Q. DID YOU HAVE ANY REASON TO BELIEVE THAT
12 NIOSH HAD HIRED PEOPLE TO DO A STUDY THAT WEREN'T
13 QUALIFIED?

14 A. YES, I DID.

15 Q. WHAT WAS THAT, SIR?

16 A. WE WERE INFORMED, ABOUT THE SAME TIME, OF A
17 SIMILAR STUDY RUN BY THE SAME GROUP ON THE MINERS OF THE
18 HOMESTAKE GOLD MINE IN LEAD, SOUTH DAKOTA.

19 Q. AND WHAT WAS IT? WAS THERE SOMETHING OF
20 CONCERN TO YOU ABOUT THE WAY THAT SOUTH DAKOTA STUDY WAS
21 CONDUCTED?

22 A. YES, THERE WAS.

23 Q. AND WHAT WAS THAT?

24 A. THE FINDINGS THAT -- FIRST OF ALL, THEY
25 ACCUSED THE -- THE MAIN ALLEGATION WAS THAT THE ORES UP

1 THERE CONTAIN ASBESTOS, WHICH THEY DO NOT.

2 Q. WHAT DO YOU SAY -- DO YOU BASE THAT OPINION
3 ON, SIR, THAT THEY DO NOT CONTAIN ASBESTOS?

4 A. MINERALOGICAL INFORMATION COMING FROM OUR
5 MINERALOGIST, WHO --

6 Q. DID YOU ACTUALLY SEND MINERALOGISTS THERE?

7 A. NO, NO, NO. I GOT THE INFORMATION FROM OUR
8 MINERALOGIST. HOW HE GOT IT, I DON'T KNOW, BUT IT'S
9 COMMON KNOWLEDGE, IF YOU WANT TO FIND OUT WHETHER AN ORE
10 CONTAINS ASBESTOS, TO GO TO THE LITERATURE.

11 Q. WHAT LITERATURE ARE YOU REFERRING TO?

12 A. MINERALOGICAL LITERATURE.

13 Q. YOU ASSUME HE WENT TO THE MINERALOGICAL
14 LITERATURE?

15 A. I JUST KNOW THAT HE TOLD ME THIS.

16 Q. WHO OWNED THE SOUTH DAKOTA MINE?

17 A. HOMESTAKE MINING COMPANY.

18 Q. HOMESTAKE. OKAY.

19 AND THAT WAS A STUDY DONE BY NIOSH ON THE
20 HOMESTAKE MINE?

21 A. YES.

22 Q. AND THEY FOUND ASBESTOS?

23 A. THEY ALLEGED THAT THEY FOUND ASBESTOS.

24 Q. OKAY. HAVE YOU EVER HEARD OF A MR. JOSEPH
25 WAGNER?

1 A. YES.

2 Q. WHEN WAS THE FIRST TIME YOU HAD HEARD OF
3 HIM?

4 A. ABOUT -- ABOUT 1975.

5 Q. AND WHAT WAS IT THAT YOU HAD HEARD ABOUT
6 DR. WAGNER?

7 A. HE, I BELIEVE -- HE WAS IN THE -- HE WAS IN
8 THE NIOSH ORGANIZATION, AND HE WAS ONE OF THE RESEARCHERS
9 ON THE HOMESTAKE MINE.

10 Q. DID YOU KNOW OF HIS QUALIFICATIONS AT THE
11 TIME THAT NIOSH WAS DOING THEIR STUDY?

12 A. NO.

13 Q. DO YOU KNOW ANYTHING AT ALL, AS YOU SIT
14 HERE TODAY, OF DR. WAGNER'S QUALIFICATIONS?

15 A. NO.

16 Q. OKAY. DID YOU KNOW THAT HE WAS GOING TO BE
17 ONE OF THE AUTHORS OF THE STUDY?

18 A. OF WHAT STUDY?

19 Q. THE NIOSH STUDY.

20 A. WHAT NIOSH STUDY?

21 Q. THE NIOSH STUDY THAT WE ARE REFERRING TO,
22 OF --

23 A. OF HOMESTAKE?

24 Q. NO. OF YOUR TALC MINES.

25 A. I AM NOT -- I DON'T KNOW WHETHER I KNEW

1 THAT AT THE TIME OR NOT.

2 Q. HAVE YOU EVER HEARD OF A JOHN DEMENT?

3 A. YES.

4 Q. WHEN WAS THE FIRST TIME YOU HAD HEARD OF
5 DR. DEMENT?

6 A. I BELIEVE THAT WAS 1975.

7 Q. OKAY. AROUND THE SAME TIME THAT YOU HAD
8 HEARD OF DR. WAGNER?

9 A. YES.

10 Q. AND DID YOU, IN 1975, KNOW WHAT HIS
11 QUALIFICATIONS WERE?

12 A. YES.

13 Q. AND WHAT DID YOU THINK HIS QUALIFICATIONS
14 WERE IN 1975?

15 A. I DIDN'T THINK; I KNEW.

16 Q. WHAT DID YOU KNOW --

17 A. INDUSTRIAL HYGIENIST.

18 Q. ASIDE FROM THAT, DID YOU KNOW ANYTHING ELSE
19 ABOUT HIM?

20 A. AT THAT TIME, NO.

21 Q. OKAY. HAVE YOU EVER HEARD OF DR. DAVID
22 BROWN?

23 A. YES.

24 Q. AND WHEN WAS THE FIRST TIME YOU HEARD OF
25 DR. BROWN?

- 1 A. I AM NOT -- SOMETIME BETWEEN 1975 AND 1980.
- 2 Q. AND WHAT DID YOU LEARN ABOUT DR. BROWN
- 3 BETWEEN 1975 AND 1980?
- 4 A. THAT HE WORKED FOR NIOSH.
- 5 Q. DID YOU KNOW ANYTHING ELSE ABOUT HIM,
- 6 BESIDES THAT?
- 7 A. YES. HE WAS ASSOCIATED WITH, OR HAD
- 8 SOMETHING TO DO WITH EPIDEMIOLOGY.
- 9 Q. OKAY. DID YOU KNOW ANYTHING ELSE ABOUT
- 10 HIM?
- 11 A. NO.
- 12 Q. WHAT ABOUT RALPH D. ZINWALD?
- 13 A. YES.
- 14 Q. HAVE YOU EVER HEARD OF HIM?
- 15 A. YES.
- 16 Q. WHEN WAS THE FIRST TIME YOU HAD HEARD OF
- 17 HIM?
- 18 A. ABOUT 1975.
- 19 Q. AND WHAT DID YOU HEAR AT THAT TIME?
- 20 A. THAT HE WAS -- WORKED FOR NIOSH.
- 21 Q. DO YOU KNOW ANYTHING MORE SPECIFIC ABOUT
- 22 HIS QUALIFICATIONS?
- 23 A. NO, I DON'T.
- 24 Q. HOW ABOUT JOHN F. GAMBLE?
- 25 A. YES.

1 Q. DID YOU HEAR ABOUT HIM DURING THAT SAME
2 TIME PERIOD?

3 A. YES.

4 Q. DID YOU KNOW ANYTHING SPECIFIC ABOUT HIS
5 QUALIFICATIONS?

6 A. YES, I DO.

7 Q. WHAT'S THAT?

8 A. HE'S AN INDUSTRIAL HYGIENIST AND AN
9 EPIDEMIOLOGIST.

10 Q. DID YOU KNOW THAT IN 1975?

11 A. IN 1975, I KNEW HE WAS AN INDUSTRIAL
12 HYGIENIST.

13 Q. HOW ABOUT WILLIAM FELNER?

14 A. I NEVER KNEW HIM.

15 Q. DO YOU KNOW WHO HE IS AS YOU SIT HERE
16 TODAY?

17 A. I BELIEVE HE'S AN AUTHOR OF SOME NIOSH
18 DOCUMENTS.

19 Q. OKAY. IS THAT -- DO YOU HAVE ANY OTHER
20 INFORMATION ON HIM?

21 A. NO, I DON'T.

22 Q. OKAY. AND OF THESE GENTLEMEN THAT I HAVE
23 JUST MENTIONED, IN 1975, DID YOU HAVE ANY REASON TO
24 QUESTION THEIR ABILITIES IN THEIR PARTICULAR FIELD OF
25 EXPERTISE?

1 A. NOT INDIVIDUALLY, NO.

2 Q. AND WHAT WAS YOUR CONCERN WITH THE NIOSH
3 STUDY?

4 A. WELL, BECAUSE OF THE -- SEVERAL OF THOSE
5 PEOPLE THAT WERE RUNNING THE STUDY OF OURS HAD BEEN ON
6 THE -- MEMBERS OF THE SAME STUDY GROUP THAT HAD DONE THE
7 HOMESTAKE STUDY.

8 Q. SIR, I AM TALKING ABOUT PRIOR TO
9 COMMISSIONING THE TABERSHAW STUDY. YOU JUST REFERRED TO
10 PEOPLE RUNNING YOUR STUDY. I ASSUME THAT MEANS ONCE YOU
11 COMMISSSIONED IT; IS THAT CORRECT?

12 A. SAY THAT OVER AGAIN.

13 Q. WELL, I AM TRYING TO FIND OUT WHAT CAUSED
14 YOU TO COMMISSION THE TABERSHAW STUDY.

15 A. I TOLD YOU THAT.

16 Q. AND YOU TOLD ME THAT YOU WERE CONCERNED
17 ABOUT --

18 A. -- THE ACCURACY OR THE COMPETENCE, OR BOTH,
19 OF THE NIOSH ORGANIZATION.

20 Q. OKAY. OH. THE ORGANIZATION IN GENERAL?

21 A. YES. NOT THE INDIVIDUALS.

22 Q. OKAY. WHAT IS YOUR UNDERSTANDING OF
23 NIOSH'S FUNCTION AS AN ORGANIZATION?

24 A. IT'S A RESEARCH ARM FOR THE -- FOR THE --
25 TODAY, FOR THE OCCUPATIONAL SAFETY AND HEALTH

1 ADMINISTRATION, AND FOR MINE SAFETY AND HEALTH
2 ADMINISTRATION.

3 Q. AND THAT WAS IN 1975 TOO; IS THAT CORRECT?

4 A. IN 1975, IT WAS THE RESEARCH ARM ONLY FOR
5 THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

6 Q. AND AT THAT TIME, YOU QUESTIONED THE
7 ABILITY OF NIOSH AS AN ORGANIZATION?

8 A. YES. NOT THE INDIVIDUALS; THE WHOLE -- THE
9 GROUP. THE -- YES, NIOSH AS A GROUP, NOT THE
10 INDIVIDUALS.

11 Q. OKAY.

12 A. I DIDN'T KNOW THE INDIVIDUALS.

13 Q. OKAY. SO YOU DIDN'T KNOW WHO EXACTLY WAS
14 GOING TO DO THE STUDY WHEN YOU COMMISSIONED THE
15 TABERSHAW STUDY?

16 A. YES, I DID KNOW -- I DID KNOW WHO WAS --
17 SOME OF THEM WHO WERE GOING TO DO IT.

18 Q. BUT YOU DIDN'T HAVE ANY REASON TO DOUBT
19 THEIR QUALIFICATIONS AT THAT TIME, DID YOU?

20 A. AT THAT TIME, NO.

21 Q. OKAY. DID YOU HAVE ANY PRELIMINARY
22 FINDINGS OR PRELIMINARY NOTICE OF WHAT NIOSH WAS
23 ATTEMPTING TO FIND?

24 A. ONLY THAT THEY WANTED TO MAKE A HEALTH
25 STUDY, AND IT WAS OBVIOUS FROM THAT, THAT THEY WOULD LOOK

1 AT HEALTH MATTERS.

2 Q. OKAY. WERE THERE ANY OTHER REASONS WHY YOU
3 COMMISSIONED THE TABERSHAW STUDY?

4 MR. BENDER: OTHER THAN WHAT HE'S SAID SO FAR?

5 MS. EISENSTEIN: HE'S GIVEN US ONE REASON, AND I
6 WAS WONDERING IF THERE WERE ANY OTHER REASONS.

7 THE WITNESS: THE REASON I GAVE YOU WAS BECAUSE
8 THEY WERE NOT -- DO YOU WANT TO READ THAT BACK? THE
9 REASON I GAVE YOU, WHAT DID I SAY?

10 (DISCUSSION ENSUED OFF THE RECORD.)

11 MR. BENDER: HE SAID HE WAS CONCERNED ABOUT THE
12 ACCURACY OR COMPETENCY, OR BOTH, OF THE NIOSH GROUP.

13 BY MS. EISENSTEIN:

14 Q. WERE THERE ANY OTHER REASONS, ASIDE FROM
15 THAT, FOR COMMISSIONING THE STUDY?

16 A. NONE OTHER THAN THE GENERAL OVERALL FACT
17 THAT WE WOULD LIKE TO KNOW EXACTLY WHAT THE HEALTH
18 SITUATION WOULD BE.

19 Q. SIR, DO YOU REMEMBER HAVING YOUR DEPOSITION
20 TAKEN BY STEVEN DITLINGER IN TEXAS IN 1985?

21 A. YES, I DID.

22 Q. DO YOU REMEMBER -- AND THAT WAS THE LOPEZ
23 CASE?

24 A. YES.

25 Q. OKAY. IF I REPRESENT TO YOU THAT IN ANSWER

1 TO THAT SAME QUESTION, WHY DID YOU COMMISSION THE
2 TABERSHAW STUDY, YOU RESPONDED TWO REASONS: ONE WHICH
3 YOU HAVE JUST GIVEN US, YOUR CONCERN WITH NIOSH, AND THE
4 SECOND ONE BEING THAT YOU FELT YOU HAD A, QUOTE, UNIQUE
5 PRODUCT, AND WERE NOT -- DID NOT BELIEVE THAT THERE WAS
6 ENOUGH MEDICAL LITERATURE IN -- IN TERMS OF THE HAZARDS
7 OF THAT PRODUCT, DOES THAT SOUND LIKE --

8 A. YES, THAT WOULD FOLLOW, MORE OR LESS, ON
9 THE ELABORATION OF -- ON WHAT I JUST FINISHED SAYING:
10 THAT WE WOULD LIKE TO KNOW -- AND YOU WOULDN'T LIKE TO
11 KNOW IF YOU ALREADY HAD THAT, WOULD YOU, IF YOUR PRODUCT
12 WASN'T UNIQUE?

13 Q. SO IS THAT AN ACCURATE STATEMENT OF WHAT
14 YOU SAID IN THAT DEPOSITION?

15 A. YES.

16 Q. AND AS YOU SIT HERE TODAY, DO YOU AGREE
17 WITH THAT?

18 A. YES.

19 Q. SO THERE WAS A SECOND REASON?

20 A. I TOLD YOU THERE WAS.

21 MR. BENDER: WHAT ARE YOU ARGUING ABOUT, COUNSEL?

22 MS. EISENSTEIN: NO, I AM NOT ARGUING, COUNSEL.

23 THERE WAS NO ARGUMENT AT ALL.

24 MR. BENDER: OKAY. THAT'S UNDERSTOOD.

25 THE WITNESS: AND I HAVE GIVEN IT.

1 BY MS. EISENSTEIN:

2 Q. YOU FELT THERE WAS NOT ADEQUATE DATA ON
3 YOUR UNIQUE PRODUCT?

4 A. YES, THAT'S AN ACCURATE STATEMENT.

5 Q. OKAY. AS OF 1975 -- HAVE YOU EVER HEARD OF
6 A DOCTOR NAMED DR. CLINEFELD (PH.)?

7 A. YES.

8 Q. HAVE YOU HEARD OF DR. CLINEFELD IN 1975?

9 A. I AM NOT SURE.

10 Q. ARE YOU --

11 A. GO AHEAD.

12 Q. ARE YOU AWARE, AS YOU SIT HERE TODAY, THAT
13 DR. CLINEFELD WAS THE AUTHOR OF AT LEAST EIGHT
14 EPIDEMIOLOGICAL STUDIES REGARDING THE HEALTH HAZARDS
15 ASSOCIATED WITH EXPOSURE TO TALC?

16 A. YES.

17 Q. WHEN DO YOU THINK YOU FIRST BECAME AWARE OF
18 THE FACT THAT HE DID AT LEAST THESE EIGHT STUDIES?

19 A. I DON'T KNOW WHEN.

20 Q. NOT IN 1975?

21 A. WELL, I DON'T KNOW. I MAY HAVE BEEN IN
22 1975; I JUST DON'T KNOW.

23 Q. OKAY. ARE YOU AWARE OF THE STUDIES BY
24 CLINEFELD, AMONG OTHERS, IN 1967 AND 1974, OF ASBESTIFORM
25 IN TALC MINERS AND MILLERS AT YOUR MINES, WHICH

1 DEMONSTRATED A SIGNIFICANTLY INCREASED PROPORTIONATE
2 MORTALITY DUE TO BOTH MALIGNANT AND NONMALIGNANT
3 RESPIRATORY DISEASES?

4 MR. BENDER: OBJECTION. UNFAIR QUESTION. IS HE
5 AWARE OF WHAT? A REPORT BY THIS DOCTOR CLAIMING THAT?

6 MS. EISENSTEIN: EXACTLY. TWO REPORTS.

7 THE WITNESS: LET ME GO OVER THAT QUESTION VERY
8 CAREFULLY. YOU -- START IT ALL AGAIN AND GIVE IT TO ME
9 STRAIGHT. AM I AWARE --

10 MS. EISENSTEIN: I AM ONLY BEING STRAIGHT.

11 THE WITNESS: OKAY.

12 BY MS. EISENSTEIN:

13 Q. ARE YOU AWARE, AS YOU SIT HERE TODAY, OF
14 THOSE TWO STUDIES DONE?

15 A. YES.

16 Q. REGARDING YOUR MINES?

17 A. TWO STUDIES REGARDING MY MINES? OUR
18 MINES?

19 Q. YEAH. IN 1967 AND 1974.

20 A. CLINEFELD DIDN'T -- THERE'S NO SUCH --
21 THERE'S NO SUCH STUDY OF OUR MINES BY DR. CLINEFELD ON
22 THOSE TWO DATES.

23 Q. OKAY. DO YOU HAVE ANY UNDERSTANDING, AS
24 YOU SIT HERE TODAY OF WHAT THOSE TWO STUDIES WERE?

25 A. YES.

1 Q. AND WHAT IS THAT UNDERSTANDING?

2 A. THOSE TWO STUDIES WERE STUDIES OF THE
3 INTERNATIONAL TALC COMPANY OPERATIONS, WHICH ARE NOT OUR
4 MINES.

5 Q. OKAY. ARE THEY TODAY?

6 A. ONE OF THEM IS.

7 Q. WHEN DO YOU THINK YOU FIRST --

8 A. WE BOUGHT ONE OF THEM IN 1974.

9 Q. RIGHT.

10 A. OKAY.

11 Q. WHEN DO YOU THINK YOU FIRST BECAME AWARE OF
12 THESE TWO STUDIES?

13 A. I TOLD YOU BEFORE: I AM NOT SURE EXACTLY
14 WHEN I BECAME AWARE OF THEM.

15 Q. DID YOU KNOW THAT THESE STUDIES DEALT WITH
16 MALIGNANT AND NONMALIGNANT RESPIRATORY DISEASE?

17 A. YES.

18 Q. OKAY. WERE YOU AWARE OF A FOLLOW-UP STUDY
19 IN 1975?

20 A. I AM NOT -- I AM NOT AWARE OF A 1975 STUDY.

21 Q. OKAY. ARE YOU AWARE OF A 1973 CLINEFELD
22 STUDY WHICH DEMONSTRATED THE PRESENCE OF ASBESTIFORM
23 TREMOLITE AND ANTHOPHYLLITE TALC EXTRACTED FROM ONE OF
24 YOUR MINES?

25 MR. BENDER: JUST A MOMENT. AGAIN, YOU ARE

1 ASSUMING FACTS NOT IN EVIDENCE. ARE YOU SAYING IN WHICH
2 THAT EXPERT CONTENDED THIS?

3 MS. EISENSTEIN: THAT'S EXACTLY WHAT I AM SAYING,
4 COUNSEL.

5 MR. BENDER: YOU DIDN'T PHRASE IT THAT WAY ON ANY
6 OCCASION.

7 THE WITNESS: I AM AWARE OF A 1973 PAPER BY DR.
8 CLINEFELD, IN WHICH THEY ALLEGE THAT THERE WAS
9 ASBESTIFORM -- ALLEGED ASBESTIFORM TREMOLITE. I AM AWARE
10 OF THAT, YES.

11 BY MS. EISENSTEIN:

12 Q. AND WOULD THAT HAVE BEEN FROM ONE OF YOUR
13 MINES?

14 A. THAT ONE WAS OUR MINE.

15 Q. OKAY. WHEN DID YOU FIRST BECOME AWARE OF
16 THOSE ALLEGATIONS?

17 A. I DON'T REMEMBER WHEN I FIRST BECAME AWARE
18 OF THEM.

19 Q. WERE YOU AWARE OF THEM IN 1975?

20 A. I CAN'T -- I DON'T KNOW.

21 Q. ARE YOU AWARE OF A STUDY PUBLISHED IN 1973
22 BY BLIJER AND PHARM DEALING WITH A RELATIONSHIP BETWEEN
23 INDUSTRIAL TALC EXPOSURE AND GI CANCER?

24 A. BLIJER? HOW DO YOU SPELL THE BLIJER?

25 Q. B-L-I-J-E-R?

- 1 A. AND WHAT WAS THE OTHER ONE?
- 2 Q. PHARM, P-H-A-R-M.
- 3 A. NO, I AM NOT AWARE OF THAT ONE.
- 4 Q. HAVE YOU EVER HEARD, FROM ANY SOURCE, THAT
- 5 EXPOSURE TO TALC CAUSES GI CANCER?
- 6 A. NEVER.
- 7 Q. NEVER?
- 8 A. ON ANY -- IN ANY BOOK; AND I HAVE READ THEM
- 9 ALL.
- 10 Q. HAVE YOU OR, HAS ANYONE ON VANDERBILT'S
- 11 BEHALF, EVER TESTED TO DETERMINE WHETHER EXPOSURE TO TALC
- 12 CAUSES GI CANCER?
- 13 A. IF IT HAD CAUSED GI CANCER, IT WOULD HAVE
- 14 COME OUT IN EITHER THE NIOSH STUDY THAT WAS PUBLISHED IN
- 15 1980, OF OUR TALC, OR THE TABERSHAW STUDY, WHICH WAS
- 16 PUBLISHED IN THE JOURNAL OF OCCUPATIONAL MEDICINE, OR THE
- 17 LAMM STUDY, WHICH IS IN PUBLICATION.
- 18 Q. THE NIOSH --
- 19 A. OR THE CLINEFELD STUDY OF 1973, THAT WILL
- 20 -- IN THE 1967 STUDY OF THE 1974 STUDY, WHICH WAS NOT ON
- 21 -- ON OUR TALC, BUT IT WAS ON TALC FROM --
- 22 Q. THE NIOSH STUDY YOU JUST REFERRED TO, IS
- 23 THAT THE ONE THAT WAS COMMISSSIONED -- THAT NIOSH WAS
- 24 CONDUCTING ON YOUR MINES --
- 25 A. YES.

1 Q. -- THAT WE WERE DISCUSSING EARLIER?

2 A. YES.

3 Q. OKAY. SIR, ARE YOU FAMILIAR WITH A STUDY
4 DONE IN 1942 BY A DR. SEGAL?

5 A. YES.

6 Q. WHAT'S YOUR UNDERSTANDING, AS YOU SIT HERE
7 TODAY, OF THAT STUDY?

8 A. I DON'T REMEMBER WHAT WAS IN THAT STUDY,
9 OTHER THAN IT CONCERNED SOME FORM OF INDUSTRIAL TALC FROM
10 SOME AREA IN THE UNITED STATES.

11 Q. WHEN DID YOU FIRST BECOME AWARE OF THAT
12 STUDY?

13 A. I DON'T KNOW WHEN I FIRST BECAME AWARE OF
14 IT.

15 Q. OKAY. AND IF I TOLD YOU THAT STUDY
16 HAD THEN IDENTIFIED 32 PNEUMOCONIOSIS,
17 P-N-E-U-M-O-C-O-N-I-O-S-I-S, CASES, THAT WERE IDENTIFIED
18 AND WERE FOLLOWED PROSPECTIVELY BY CLINEFELD UNTIL 1955,
19 AND THAT AT THAT TIME, IT WAS CLINEFELD'S CONCLUSION THAT
20 FIVE OUT OF NINETEEN DEATHS WERE BELIEVED DUE TO TALC
21 EXPOSURE, IS THAT YOUR UNDERSTANDING?

22 A. NO. I DON'T REMEMBER THAT AT ALL.

23 MR. BENDER: THAT ARTICLE SPEAKS FOR ITSELF, ON
24 WHETHER IT IS CORRECT OR NOT.

25 MS. EISENSTEIN: THAT'S NOT WHAT I AM ASKING; I AM

1 JUST CONCERNED ABOUT HIS KNOWLEDGE RIGHT NOW.

2 THE WITNESS: I DON'T REMEMBER THAT -- THAT
3 DETAIL.

4 MS. EISENSTEIN: OKAY.

5 Q. HAVE YOU EVER HEARD, FROM ANY SOURCE, THAT
6 THE CLINEFELD STUDY OF 1955 DOCUMENTED ONE DEATH CAUSED
7 BY MESOTHELIOMA?

8 A. I AM NOT AWARE.

9 Q. ARE YOU AWARE OF CLINEFELD'S 1974 STUDY,
10 AND I AM GOING TO GIVE YOU THE NAME OF THE STUDY,
11 "MORTALITY EXPERIENCED AMONG TALC WORKERS, A FOLLOW-UP
12 STUDY"?

13 A. YES.

14 Q. HAVE YOU EVER HEARD OF THAT?

15 A. YES.

16 Q. WHAT IS YOUR UNDERSTANDING OF WHAT THE
17 CONCLUSIONS WERE OF THAT STUDY?

18 A. I DON'T REMEMBER THE CONCLUSIONS OF THAT
19 STUDY.

20 Q. OKAY.

21 A. THAT WAS NOT AT OUR MINES.

22 Q. WHOSE MINES WERE THOSE AT?

23 A. INTERNATIONAL TALC COMPANY.

24 Q. OKAY. IF I TOLD YOU THAT HE DOCUMENTED
25 THIRTEEN DEATHS DUE TO LUNG CANCER, WHERE ONLY FOUR WERE

1 EXPECTED IN THE POPULATION AT LARGE, WOULD THAT REFRESH
2 YOUR MEMORY?

3 MR. BENDER: I AM OBJECTING TO THAT LINE OF INQUIRY
4 FROM THIS POINT ON, WHERE -- THAT "IF I TOLD YOU" ROUTINE
5 IS AN IMPROPER QUESTION; IT ASSUMES FACTS NOT IN
6 EVIDENCE.

7 AND I HAVE BEEN PATIENT IN ALLOWING QUITE A
8 FEW QUESTIONS, BUT NO FURTHER QUESTIONS.

9 MS. EISENSTEIN: NO FURTHER QUESTIONS AT ALL,
10 COUNSEL?

11 MR. BENDER: ALONG THAT LINE, AS I TOLD YOU,
12 BECAUSE THAT'S AN IMPROPER FORM OF INQUIRY.

13 MS. EISENSTEIN: I AM TRYING TO SEARCH HIS MEMORY
14 AS TO WHAT THE STUDIES SAID, OR WHETHER HE HAD KNOWLEDGE
15 OF IT.

16 MR. BENDER: WELL, YOU ARE IMPROPERLY PHRASING THE
17 QUESTION.

18 BY MS. EISENSTEIN:

19 Q. SIR --

20 MR. BENDER: ASSUMES FACTS NOT IN EVIDENCE.

21 MS. EISENSTEIN: -- HAD YOU HEARD OF DR. TABERSHAW
22 BEFORE HE WAS COMMISSIONED TO DO A STUDY FOR YOU?

23 THE WITNESS: I DON'T BELIEVE -- I DON'T REMEMBER
24 IF I EVER HEARD OF HIM BEFORE 1975 OR NOT. I DON'T
25 REMEMBER THAT.

1 BY MS. EISENSTEIN:

2 Q. SO TO YOUR KNOWLEDGE, DR. TABERSHAW HAD HAD
3 NO CONTACT WITH VANDERBILT PRIOR TO THE COMMISSION OF
4 THAT STUDY?

5 A. TO MY KNOWLEDGE, HE DIDN'T.

6 Q. DO YOU KNOW HOW MUCH VANDERBILT PAID FOR
7 THAT STUDY?

8 A. NO, I DON'T.

9 Q. IF YOU WANTED TO FIND OUT, WHERE WOULD YOU
10 GO?

11 A. SAME PLACE AS I WOULD GO TO ANSWER THAT
12 PREVIOUS QUESTION YOU HAD ON THE --

13 Q. THE TREASURER?

14 A. YEAH, THE TREASURER.

15 Q. OKAY. DID YOU EVER SEE ANY DRAFTS OF THE
16 TABERSHAW STUDY PRIOR TO ITS COMPLETION?

17 A. YES.

18 Q. DID YOU SEE MORE THAN ONE DRAFT?

19 A. I CAN'T REMEMBER HOW MANY I SAW.

20 Q. DID DR. TABERSHAW OR SOMEONE FROM HIS FIRM
21 SUBMIT THOSE DRAFTS TO YOU?

22 A. YES.

23 Q. WHAT WAS THE PURPOSE OF SUBMITTING THOSE
24 DRAFTS TO YOU?

25 A. A COMMON PRACTICE IN EPIDEMIOLOGY STUDIES

1 WOULD ACCOMPANY -- WHERE NIOSH DOES THE SAME THING, IS TO
2 SUBMIT YOUR DRAFT TO THE PEOPLE FOR THE COMPANY YOU ARE
3 STUDYING, TO SEE IF THERE'S ANY INACCURACIES.

4 Q. ISN'T THE -- ALL RIGHT, SIR. DID YOU MAKE
5 ANY CHANGES IN THE DRAFTS THAT WERE SUBMITTED TO YOU?

6 A. WHICH ONES? FROM NIOSH OR FROM --

7 Q. NO. FROM TABERSHAW.

8 A. TABERSHAW? I CAN'T REMEMBER.

9 Q. WOULD IT BE A COMMON PRACTICE, IN THIS TYPE
10 OF STUDY, FOR THE FIRM COMMISSIONED TO DO THE STUDY TO
11 SUBMIT IT FOR CORRECTIONS TO THE COMPANY?

12 A. AS I SAID, IT'S A COMMON PRACTICE IN ALL
13 EPIDEMIOLOGICAL STUDIES, INCLUDING THE NIOSH PEOPLE, WHO
14 SUBMITTED THERE'S TO US FOR CORRECTION OF ANY
15 INACCURACIES. YOU WANT AN ACCURATE DOCUMENT TO GO OUT.

16 THEY DON'T HAVE TO ACCEPT OUR -- OUR
17 CORRECTIONS; YOU KNOW THAT.

18 Q. I'M SORRY; I DIDN'T HEAR YOU.

19 A. THEY DON'T HAVE TO ACCEPT OUR CORRECTIONS,
20 BUT IN ORDER TO MAKE AN ACCURATE DOCUMENT, ALL
21 EPIDEMIOLOGICAL STUDIES, BECAUSE OF THEIR COMPLEXITY,
22 THEY ARE SENT BY THE PEOPLE WHO ARE STUDYING IT FOR
23 CORRECTIONS OF ANY INACCURACIES.

24 Q. WELL, DO YOU REMEMBER HAVING MADE
25 CORRECTIONS?

1 A. ON --

2 Q. ON ANY OF THE DRAFTS SUBMITTED TO YOU.

3 A. BY TABERSHAW?

4 Q. BY TABERSHAW. WE ARE JUST TALKING ABOUT
5 THE TABERSHAW STUDY.

6 A. TABERSHAW?

7 Q. YES.

8 A. I DON'T RECALL MAKING ANY CORRECTIONS.

9 Q. OKAY. I AM GOING TO SHOW YOU, SIR, A
10 DOCUMENT WHICH IS ENTITLED "REVIEW OF OCCUPATIONAL
11 MORBIDITY AND MORTALITY AT THE GOUVERNEUR TALC COMPANY,
12 DRAFT" AND ASK YOU TO LOOK AT IT AND TELL ME IF YOU HAVE
13 EVER SEEN IT BEFORE (INDICATING).

14 MS. EISENSTEIN: THAT'S MY COPY. LET ME GIVE YOU
15 YOUR OWN COPY.

16 MR. BENDER: WHICH ONE IS GOING TO BE GOING INTO
17 EVIDENCE?

18 MS. EISENSTEIN: THE ONE I SHOW YOU. THE ONE I
19 SHOW YOU.

20 CAN I HAVE THAT ONE BACK FOR A MOMENT,
21 PLEASE? THANKS.

22 BY MS. EISENSTEIN:

23 Q. HAVE YOU EVER SEEN THAT BEFORE
24 (INDICATING)?

25 MR. BENDER: WELL, I HAVEN'T LOOKED AT IT. THE ONE

1 YOU HANDED US WAS SO MUCH THICKER, THAT -- MAYBE THEY ARE
2 NOT THE SAME.

3 MS. EISENSTEIN: YOU TELL ME (INDICATING).

4 MR. BENDER: I HAVEN'T LOOKED AT IT, BUT HOW MANY
5 PAGES --

6 MS. EISENSTEIN: I PROMISE I AM BEING STRAIGHT WITH
7 YOU.

8 MR. BENDER: THERE'S SIXTEEN PAGES; DO YOU WANT THE
9 WITNESS TO READ THE SIXTEEN PAGES, MA'AM?

10 MS. EISENSTEIN: I JUST WANT HIM TO REVIEW IT TO
11 SEE IF HE HAS EVER SEEN IT, WHATEVER IT TAKES.

12 MR. BENDER: OKAY. AND IF YOUR INQUIRY IS TO FIND
13 OUT WHETHER HE'S EVER SEEN IT, THEN HE CAN REVIEW IT MUCH
14 MORE RAPIDLY.

15 MS. EISENSTEIN: THAT'S MY QUESTION; I WOULD LIKE
16 HIM TO READ THROUGH IT, THOUGH.

17 MR. BENDER: THE ENTIRE DOCUMENT? OKAY.

18 MR. MACAULEY: WOULD YOU BE AVERSE TO GIVING US A
19 COPY OF THAT BLIJER AND PHARM STUDY?

20 MS. EISENSTEIN: IF I HAVE IT.

21 (DISCUSSION ENSUED OFF THE RECORD.)

22 MR. BENDER: HOW DO YOU CONTEND THAT ANY OF THIS IS
23 RELEVANT, WHEN THIS IS AN ENTIRELY DIFFERENT PART OF HER
24 BODY, OTHER THAN WHAT SHE DIED FROM? THIS ALL HAS TO DO
25 WITH THE RESPIRATORY SYSTEM.

1 THE REPORTER: DO YOU WANT THIS ON THE RECORD?

2 MS. EISENSTEIN: YES.

3 COUNSEL, I DON'T THINK THIS IS THE TIME OR
4 THE PLACE TO DECIDE WHETHER OR NOT THERE'S EVEN -- I AM
5 NOT SURE WHAT YOU ARE ASKING.

6 MR. BENDER: I AM REALLY ASKING WHAT THE RELEVANCY
7 IS, FROM AN ARTICLE THAT DOES NOT CONCERN THE REASON OR
8 REASONS WHY MRS. SCHWARTZ PASSED AWAY.

9 MS. EISENSTEIN: WELL, I THINK WE HAVE A DIFFERENCE
10 OF OPINION, IN THAT I THINK IT'S HIGHLY RELEVANT, IN THAT
11 IT SHOWED CANCER OF ONE TYPE SHOULD HAVE BEEN NOTICE OF A
12 DUTY TO TEST FOR CANCER; AND IF YOU WANT TO DISCUSS THAT
13 AT A LATER DATE, COUNSEL, THAT'S FINE.

14 MR. BENDER: YOU DIDN'T ANSWER MY QUESTION,
15 REALLY.

16 MS. EISENSTEIN: HOW ABOUT KNOWLEDGE OF A HAZARD?

17 MR. BENDER: THAT IS NOT RELATED TO THE
18 LITIGATION. TOTALLY IRRELEVANT.

19 (WHEREUPON, A CONFERENCE OFF THE
20 RECORD TOOK PLACE BETWEEN COUNSEL
21 AND THE WITNESS AT THIS POINT.)

22 MS. EISENSTEIN: CAN WE GO BACK ON THE RECORD?

23 Q. SIR, HAVE YOU HAD TIME TO REVIEW THIS
24 DOCUMENT?

25 A. YES, I HAVE.

1 Q. HAVE YOU EVER SEEN THIS DOCUMENT BEFORE?

2 A. I CAN'T REMEMBER SEEING THIS DOCUMENT
3 BEFORE.

4 Q. WOULD YOU BE GOOD ENOUGH TO --

5 MR. BENDER: PLEASE REPHRASE IT COUNSEL. I MEAN
6 THOSE ARE JUST WORDS.

7 MS. EISENSTEIN: PARDON?

8 MR. BENDER: WOULD YOU BE GOOD ENOUGH --

9 MS. EISENSTEIN: WHAT WOULD YOU LIKE ME TO SAY,
10 COUNSEL?

11 MR. BENDER: I DON'T KNOW, BUT SOMETHING OTHER THAN
12 THAT PHRASEOLOGY. I DON'T KNOW WHAT YOU ARE INTENDING TO
13 ASK.

14 BY MS. EISENSTEIN:

15 Q. LOOK AT PAGE 11, PLEASE. DO YOU SEE THE
16 NOTATIONS IN HANDWRITING AT THE TOP?

17 A. YES.

18 Q. DOES THAT HANDWRITING LOOK FAMILIAR TO YOU?

19 A. NOT AT ALL.

20 Q. AS YOU SIT HERE TODAY, YOU HAVE NO IDEA
21 WHOSE HANDWRITING THAT WOULD BE?

22 A. NO IDEA.

23 Q. DOES THIS APPEAR TO BE A DRAFT OF THE
24 TABERSHAW STUDY?

25 MR. BENDER: WELL, THAT ASKS FOR HIM TO SPECULATE,

1 SO I -- WAIT A MINUTE.

2 THE WITNESS: I DON'T KNOW.

3 MS. EISENSTEIN: YOU DON'T KNOW?

4 MR. BENDER: YOU ARE NOT SUPPOSED TO SPECULATE.

5 WHEN I OBJECT, DON'T ANSWER, BECAUSE I AM INSTRUCTING YOU
6 NOT TO SPECULATE.

7 YOU ARE GOING TO ATTACH THAT TO THE
8 DEPOSITION, COUNSEL? OR IN ANY EVENT, MAKE A COPY
9 AVAILABLE TO ALL COUNSEL?

10 MS. EISENSTEIN: SURE. THAT'S WHAT I WILL DO.

11 MR. BENDER: THAT'S FINE.

12 BY MS. EISENSTEIN:

13 Q. SIR, I AM GOING TO NOW HAND YOU A DOCUMENT
14 WHICH IS ENTITLED, "A MORBIDITY STUDY OF EMPLOYEES AT
15 GOUVERNEUR TALC COMPANY", SUBMITTED BY TABERSHAW
16 OCCUPATIONAL MEDICINE ASSOCIATES, AND ASK YOU, PLEASE, TO
17 REVIEW IT, AND AFTER REVIEWING IT, I WILL HAVE SOME
18 QUESTIONS FOR YOU (INDICATING).

19 THE WITNESS: I CAN'T REMEMBER --

20 (WHEREUPON, A CONFERENCE OFF THE
21 RECORD TOOK PLACE BETWEEN COUNSEL
22 AND THE WITNESS AT THIS POINT.)

23 BY MS. EISENSTEIN:

24 Q. HAVE YOU REVIEWED THE DOCUMENT, SIR?

25 A. NO, NOT YET.

1 Q. OH, I'M SORRY.

2 MR. BENDER: IT CONSISTS OF 47 PAGES, AND --

3 MS. EISENSTEIN: I THOUGHT HE HAD FINISHED.

4 MR. BENDER: -- AND IT WAS PROBABLY THIRTY SECONDS
5 AFTER YOU ASKED HIM TO REVIEW THAT YOU ASKED --

6 COULD WE GO OFF THE RECORD, AND YOU TELL US
7 WHAT INPUT WE ARE GOING TO MAKE HERE, SO WE SHOULD KNOW
8 WHETHER WE ARE GOING TO READ THE 47 PAGES OR --

9 MS. EISENSTEIN: I WOULD LIKE TO START WITH ASKING
10 IF HE'S EVER SEEN THAT BEFORE.

11 MR. BENDER: ARE YOU GOING TO STOP IN THE
12 QUESTIONING? IN OTHER WORDS, I WANT TO KNOW WHETHER TO
13 READ THE 47 PAGES OR NOT. IF YOU ARE JUST GOING TO ASK
14 HIM --

15 MS. EISENSTEIN: IT DEPENDS ON WHAT HIS RESPONSE IS
16 TO THAT, COUNSEL. IF HE HAS NOT SEEN IT, I WON'T ASK HIM
17 ANY QUESTIONS REGARDING IT.

18 MR. BENDER: I ASSUME THAT HE CANNOT RECALL WHETHER
19 HE'S SEEN IT OR NOT, BECAUSE --

20 MS. EISENSTEIN: LET'S LET THE WITNESS ANSWER FOR
21 HIMSELF.

22 MR. BENDER: WELL, I JUST WANT TO KNOW HOW MUCH
23 TIME WE SHOULD SPEND ON A 47-PAGE DOCUMENT THAT --

24 MR. NISHIMURA: ARE YOU GOING TO ASK HIM SPECIFIC
25 -- SHOULD HE DIRECT HIS ATTENTION --

1 MS. EISENSTEIN: IF HE'S NEVER SEEN IT BEFORE, THEN
2 IT'S REALLY MEANINGLESS.

3 MR. NISHIMURA: LET'S MAKE A WILD ASSUMPTION THAT
4 HE HAS SEEN IT.

5 MR. BENDER: LET'S NOT. LET'S ASK HIM.

6 MS. EISENSTEIN: I WOULD LIKE TO KNOW IF THAT'S THE
7 STUDY THAT HE HAD COMMISSIONED.

8 Q. SIR, HAVE YOU HAD A CHANCE TO REVIEW THE
9 DOCUMENT?

10 A. NO, I HAVEN'T.

11 MR. BENDER: LOOK AT IT.

12 MR. NISHIMURA: THIS IS CRAZY!

13 (DISCUSSION ENSUED OFF THE RECORD.)

14 MR. BENDER: THE WITNESS IS NOT READING BUT IS
15 THUMBING THROUGH EACH PAGE.

16 MS. EISENSTEIN: SO AM I.

17 THE WITNESS: I THINK THAT'S GOOD ENOUGH. WHAT I
18 AM -- OKAY.

19 BY MS. EISENSTEIN:

20 Q. SIR, HAVE YOU HAD A CHANCE TO REVIEW THE
21 DOCUMENT?

22 A. YES, I HAVE.

23 Q. HAVE YOU EVER SEEN THAT DOCUMENT BEFORE?

24 A. I CAN'T REMEMBER SEEING THAT DOCUMENT
25 BEFORE.

1 Q. OKAY. YOU DON'T BELIEVE THAT THAT IS THE
2 TABERSHAW STUDY WE WERE DISCUSSING EARLIER?

3 A. I DON'T KNOW WHAT IT IS.

4 Q. SIR, I WOULD NOW LIKE TO HAND YOU A
5 DOCUMENT, A FOURTEEN-PAGE DOCUMENT ENTITLED, "AN
6 EVALUATION OF LUNG CANCER MORTALITY AMONG EMPLOYEES OF
7 THE GOUVERNEUR TALC COMPANY", AND AT THE BOTTOM, IT SAYS,
8 "TABERSHAW OCCUPATIONAL MEDICINE ASSOCIATES, P.A." WOULD
9 YOU PLEASE REVIEW THAT, SIR (INDICATING).

10 MR. MACAULEY: CAN I -- CAN I ASK: ARE THESE GOING
11 TO BE ATTACHED TO THE DEPOSITION OR --

12 MS. EISENSTEIN: YEAH, WE CAN ATTACH THEM TO THE
13 DEPOSITION. THAT WILL BE FINE. THAT WOULD BE MARKED
14 THEN AS PLAINTIFFS' SECOND IN ORDER.

15 MR. BENDER: WHICH ONE?

16 MS. EISENSTEIN: THIS ONE WAS -- THAT'S THE FIRST
17 ONE.

18 MR. BENDER: OKAY.

19 MS. EISENSTEIN: I WILL BE THE -- THE SIXTEEN-PAGE
20 DOCUMENT WITH A STAMP ON THE RIGHT-HAND SIDE, "DRAFT",
21 ENTITLED, "REVIEW OF OCCUPATIONAL MORBIDITY AND MORTALITY
22 AT THE GOUVERNEUR TALC COMPANY."

23

24

25

1 (WHEREUPON, THE DOCUMENT REFERRED TO
2 WAS MARKED AS PLAINTIFFS' EXHIBIT 1 FOR
3 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
4 ATTACHED HERETO.)

5 MS. EISENSTEIN: THAT'S THE SECOND IN ORDER
6 (INDICATING).

7 (WHEREUPON, THE DOCUMENT REFERRED TO
8 WAS MARKED AS PLAINTIFFS' EXHIBIT 2 FOR
9 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
10 ATTACHED HERETO.)

11 MR. BENDER: I WILL OBJECT TO THE RELEVANCY OF ANY
12 AND ALL OF THESE ON THE GROUNDS THAT THEY CONCERN LUNG
13 CANCER, AND IT'S NEVER BEEN CONTENDED THAT MRS. SCHWARTZ
14 PASSED AWAY BECAUSE OF LUNG CANCER, BUT ON THE CONTRARY,
15 BECAUSE OF CANCER OF THE LINING OF THE STOMACH.

16 MR. MACAULEY: I WILL JOIN IN THAT OBJECTION.

17 (WHEREUPON, A CONFERENCE OFF THE
18 RECORD TOOK PLACE BETWEEN COUNSEL
19 AND THE WITNESS AT THIS POINT.)

20 THE WITNESS: OKAY. I HAVE SEEN IT.

21 BY MS. EISENSTEIN:

22 Q. SIR, YOU HAVE HAD A CHANCE TO REVIEW THE
23 DOCUMENT?

24 A. YES, I HAVE.

25 MR. MACAULEY: THAT'S NO. 3?

1 MS. EISENSTEIN: THAT WILL BE PLAINTIFFS' NO. 3 IN
2 ORDER.

3 MR. BENDER: CONSISTING OF HOW MANY PAGES?
4 FOURTEEN?

5 (WHEREUPON, THE DOCUMENT REFERRED TO
6 WAS MARKED AS PLAINTIFFS' EXHIBIT 3 FOR
7 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
8 ATTACHED HERETO.)

9 MS. EISENSTEIN: THAT'S CORRECT, COUNSEL.

10 Q. HAVE YOU EVER SEEN THAT DOCUMENT BEFORE
11 (INDICATING)?

12 A. I CAN'T REMEMBER SEEING THAT ONE BEFORE.

13 Q. OKAY. SO THIS IS ALSO NOT THE TABERSHAW
14 STUDY WE TALKED ABOUT EARLIER?

15 A. I DON'T KNOW, BECAUSE I CAN'T REMEMBER
16 SEEING IT BEFORE.

17 Q. HAVE YOU EVER SEEN --

18 A. I CAN ONLY REMEMBER THE FINISHED DOCUMENT
19 IN THE JOURNAL OF OCCUPATIONAL MEDICINE, AND YOU DON'T --
20 HAVEN'T HANDED ME THAT ONE YET.

21 Q. OKAY. AND YOU HAVE READ THE TABERSHAW
22 STUDY?

23 A. THE TABERSHAW STUDY IS IN THE JOURNAL OF
24 OCCUPATIONAL MEDICINE, AND I HAVE READ THAT, AND I DON'T
25 RECOGNIZE IT AS ONE OF THESE THREE DOCUMENTS HERE, THAT

1 YOU HAVE HANDED ME.

2 Q. OKAY. AS YOU SIT HERE TODAY, WHAT IS YOUR
3 UNDERSTANDING OF THE CONCLUSIONS REACHED BY TABERSHAW AND
4 ASSOCIATES REGARDING THE STUDY, REFERRING TO --

5 A. IN GENERAL, ANY INCREASED INCIDENCE OF LUNG
6 CANCER FOUND CAN'T BE ATTRIBUTED TO OR ASSOCIATED WITH
7 EXPOSURES TO TALC DUSTS AT THE GOUVERNEUR TALC COMPANY.

8 Q. THERE WAS AN INCREASED RISK? I AM
9 CONFUSED.

10 A. I SAID ANY INCREASE IN LUNG -- IN THE
11 INCIDENCE OF LUNG CANCER AMONGST GOUVERNEUR TALC COMPANY
12 MINERS CANNOT BE ATTRIBUTED TO OR ASSOCIATED WITH
13 EXPOSURE TO THOSE DUSTS.

14 Q. WHAT TYPE OF STUDY WAS THE TABERSHAW
15 STUDY? WAS IT --

16 A. AN EPIDEMIOLOGICAL STUDY, AS I SAID BEFORE.

17 Q. OKAY. AND WAS ANY PART OF THAT STUDY A
18 CRITIQUE OF THE NIOSH STUDY?

19 A. YES, I BELIEVE IT WAS.

20 Q. WAS THAT PRIMARILY WHAT THE STUDY WAS? A
21 CRITIQUE OF THE PROCEDURES USED BY NIOSH IN DOING THEIR
22 STUDY?

23 A. ONLY INDIRECTLY, BECAUSE THE SAME DATA WAS
24 USED BY BOTH STUDY GROUPS; THEREFORE, THE SECOND STUDY BY
25 TABERSHAW CAN BE REGARDED INDIRECTLY AS A CRITIQUE OF THE

1 NIOSH STUDY.

2 Q. THE TABERSHAW STUDY DID NOT GO OUT AND
3 COLLECT NEW DATA; IS THAT CORRECT?

4 A. THAT'S RIGHT.

5 Q. OKAY. IT USED THE DATA COLLECTED BY NIOSH?

6 A. NO. IT COLLECTED THE SAME DATA AS NIOSH
7 COLLECTED.

8 Q. OKAY. SO IT WAS THE SAME DATA, THOUGH?

9 A. YES. THE DATA WAS SITTING THERE WAITING
10 FOR IT TO BE COLLECTED, BY WHATEVER GROUP CAME ALONG TO
11 STUDY, AND NIOSH COLLECTED THE DATA, AND THEN TABERSHAW
12 CAME ALONG AND WENT IN AND COLLECTED THE SAME DATA OUT OF
13 THE FILES AND OUT OF THE RECORDS.

14 Q. WHO SUPPLIED NIOSH WITH THE DATA?

15 A. ALL THE MORTALITY DATA WAS SUPPLIED BY THE
16 VANDERBILT COMPANY.

17 Q. WHAT ABOUT --

18 A. AND THEY COLLECTED THE MORBIDITY DATA, AND
19 THEY COLLECTED THEIR OWN INDUSTRIAL HYGIENE DATA.

20 Q. OKAY. SO THE NIOSH PEOPLE COLLECTED THEIR
21 OWN INDUSTRIAL HYGIENE DATA?

22 A. YES.

23 Q. AND THEY COLLECTED THEIR OWN MORBIDITY
24 DATA?

25 A. YES.

1 Q. AND THEY USED DATA SUPPLIED BY VANDERBILT
2 FOR THE MORTALITY DATA -- I MEAN THE MORTALITY STUDIES?

3 A. WE ALLOWED THEM TO LOOK AT OUR RECORDS;
4 OKAY? THAT'S NOT THE SAME THING AS "SUPPLIED." WE
5 OPENED UP OUR RECORDS --

6 Q. I UNDERSTAND.

7 A. -- TO THE NIOSH PEOPLE.

8 Q. FOR THE MORTALITY STUDY?

9 A. FOR -- THAT'S THE -- FOR THE MORTALITY
10 STUDY AND ANY PORTION OF THE -- OF THE MORBIDITY STUDY
11 THAT -- WHERE YOU CAN GET MEANINGFUL DATA OUT OF YOUR
12 RECORDS.

13 Q. OKAY. IS IT YOUR UNDERSTANDING, AS YOU SIT
14 HERE TODAY, THAT NIOSH DID SOME INDEPENDENT COLLECTION OF
15 DATA ON THE ENVIRONMENTAL STUDY AND ON THE MORBIDITY
16 STUDY?

17 A. YES. THEY DID THEIR OWN MORBIDITY STUDY,
18 IN THAT THEY BROUGHT IN THEIR OWN DOCTORS TO TAKE -- TO
19 LOOK AT THE HEALTH OF THE EXISTING WORKERS, AND THEIR
20 INDUSTRIAL HYGIENISTS COLLECTED THE DUSTS AND EVALUATED
21 THEM.

22 Q. OKAY. DID THE TABERSHAW STUDY DISCUSS OR
23 CRITIQUE NIOSH'S ENVIRONMENTAL STUDY?

24 A. TO A CERTAIN EXTENT, YES.

25 Q. TO WHAT EXTENT, SIR?

1 A. TO THE EXTENT THAT THEY CALLED INTO
2 QUESTION THEIR FINDINGS OF ASBESTOS.

3 Q. OKAY. DID THE TABERSHAW GROUP GO OUT AND
4 COLLECT THEIR OWN DATA ON -- ON INDUSTRIAL HYGIENE?

5 A. NO. THEY USED THE DATA THAT -- SOME OF THE
6 DATA THAT WAS SUPPLIED -- COLLECTED BY THE MINE SAFETY
7 AND HEALTH ADMINISTRATION, WHO WERE COLLECTING -- DOING
8 INDUSTRIAL -- AN INDUSTRIAL HYGIENE SURVEY AT THE SAME
9 TIME AS THE NIOSH PEOPLE WERE DOING IT, SO THEY WERE
10 COLLECTING PARALLEL SAMPLES, AND THE SAMPLES WERE
11 AVAILABLE TO -- AND THE RESULTS OF THE SAMPLES WERE
12 AVAILABLE TO THE TABERSHAW GROUP --

13 Q. OKAY.

14 A. -- FROM THE MINE SAFETY AND HEALTH
15 ADMINISTRATION, WHICH WAS KNOWN AS THE MINING
16 ENVIRONMENTAL AND SAFETY ADMINISTRATION AT THAT TIME.

17 Q. OKAY. DID THE TABERSHAW GROUP GO INTO THE
18 LABORATORY AND DO ITS OWN ANALYSIS OF SAMPLES?

19 A. NO; THEY ARE NOT CAPABLE OF THAT.

20 Q. OKAY. BUT THEY DID A CRITIQUE ON THE
21 LABORATORY FINDINGS THAT NIOSH DID OF THE SAMPLES?

22 A. I SAID A CERTAIN CRITIQUE; NOT A --

23 Q. OKAY.

24 A. -- DETAILED CRITIQUE.

25 Q. OKAY. THE MORBIDITY STUDY --

1 A. YES.

2 Q. AM I CORRECT IN ASSUMING THAT TABERSHAW
3 USED THE DATA COLLECTED BY NIOSH?

4 A. NO, NOT IN THE MORBIDITY STUDY. TABERSHAW
5 COLLECTED THEIR OWN MORBIDITY DATA. THEY WENT UP THERE
6 WITH THEIR PHYSICIANS, THEIR TECHNICIANS, AND COLLECTED
7 THAT DATA.

8 Q. AND HOW ABOUT -- WAS THAT THE MORTALITY
9 STUDY?

10 A. NO. THE MORBIDITY.

11 Q. AND THEY DID THE SAME WITH THE MORTALITY
12 STUDY?

13 A. NO. THE MORTALITY STUDY IS A STUDY OF --
14 THAT INVOLVES COLLECTING THE DATA THAT'S IN THE FILES,
15 THAT'S ALREADY THERE.

16 Q. RIGHT.

17 A. WHICH WE OPENED UP TO THE PEOPLE. ROSTERS
18 OF PEOPLE WHO WORKED THERE, WHO DIED AND WHO DIDN'T, AND
19 THAT WAS AVAILABLE TO ANY -- TO EITHER GROUP, THE SAME
20 DATA.

21 Q. OKAY.

22 A. IT WAS JUST HANDED TO THEM AND THEY TAKE
23 THEIR PICK.

24 Q. OKAY. IS IT YOUR UNDERSTANDING THAT ONE OF
25 THE CRITIQUES OF THE MORTALITY STUDY MADE BY -- OR

1 CRITICISMS MADE BY TABERSHAW WAS THAT NIOSH MADE SOME
2 ASSUMPTIONS BASED UPON INDIVIDUAL EMPLOYEES WHO HAD
3 WORKED FOR A VERY SHORT PERIOD OF TIME AT YOUR MINE?

4 A. THAT'S ONE OF THEM.

5 Q. DO YOU HAVE AN OPINION ON THAT PARTICULAR
6 CRITIQUE, AS YOU SIT HERE TODAY? DO YOU AGREE WITH IT?

7 A. YES, I DO.

8 Q. OKAY. WHAT WAS ANOTHER BASIS FOR THEIR
9 CRITIQUE OF THE NIOSH STUDY?

10 A. THERE WERE A NUMBER OF REASONS FOR THE
11 CRITIQUE. SINCE I AM NOT A MEDICAL PERSON, I REALLY
12 CAN'T GET INTO IT NOW.

13 Q. OKAY.

14 A. IF YOU READ THE JOURNAL OF OCCUPATIONAL
15 MEDICINE PAPER BY TABERSHAW, THEY GO OVER THAT ALL, AND I
16 CAN'T -- I AM NOT IN A POSITION, TECHNICALLY, TO DISCUSS
17 THAT WITH YOU.

18 Q. OKAY. BUT YOU HAVE READ THE STUDY;
19 CORRECT?

20 A. I HAVE, AND THERE ARE A COUPLE OF SALIENT
21 FEATURES, AND THE ONE YOU JUST MENTIONED WAS THE WRONG
22 LONG-TERM EXPOSURE, THAT SAYS THE SHORTER YOU WORK FOR
23 VANDERBILT, THE MORE LIKELY YOU ARE TO GET LUNG CANCER.

24 Q. IS THAT YOUR UNDERSTANDING, THAT THAT'S
25 WHAT IT SAID?

1 A. THAT'S WHAT IT COMES OUT AS, IN THE NIOSH
2 STUDY.

3 Q. THE NIOSH STUDY SAYS THAT THE SHORTER THE
4 PERIOD OF TIME THAT YOU WORK FOR -- THAT THEY WORKED FOR
5 VANDERBILT, THE GREATER THE RISK OF CANCER?

6 MR. BENDER: WELL, NOW, WHATEVER IT SAYS, IT'S THE
7 BEST EVIDENCE OF WHAT THE DOCUMENT SAYS.

8 MS. EISENSTEIN: I WANTED TO KNOW IF THAT'S HIS
9 UNDERSTANDING.

10 THE WITNESS: WELL, THAT'S WHAT IT SOUNDS LIKE WHEN
11 YOU READ IT, OPPOSITE OF WHAT YOU COULD POSSIBLY
12 IMAGINE.

13 BY MS EISENSTEIN:

14 Q. OKAY. WERE THERE ANY DISCUSSIONS, THAT YOU
15 ARE AWARE OF, AT THE TIME THAT THE TABERSHAW FINDINGS
16 WERE MADE OFFICIAL, OR MADE KNOWN TO YOU, REGARDING THAT
17 PARTICULAR CRITIQUE THAT -- ABOUT THE DURATION OF TIME
18 THAT SOME OF THE EMPLOYEES WERE EXPOSED?

19 A. YES.

20 Q. DID YOU HAVE DISCUSSIONS WITH ANYONE
21 REGARDING THAT PARTICULAR FINDING?

22 A. YES.

23 Q. WHAT WAS THE SUBSTANCE OF THOSE
24 DISCUSSIONS, SIR?

25 A. I THINK THE ONE WE DISCUSSED THE MOST WAS

1 THE -- THE INCLUSION BY NIOSH, IN THEIR COHORT, PEOPLE
 2 EXPOSED TO -- TO VANDERBILT DUST, IS TO A MAN WHO HAD
 3 NEVER BEEN EXPOSED TO VANDERBILT DUSTS. HE WORKED EIGHT
 4 DAYS AS A CARPENTER IN 1948, BEFORE THEY DUG UP THE FIRST
 5 POUND OF TALC, AND THIS IS SO RIDICULOUS THAT IT IS THE
 6 SUBJECT OF CONVERSATION.

7 Q. OKAY. BUT HE DIED OF THE LUNG CANCER AT A
 8 LATER DATE, SO THEREFORE, HE WAS INCLUDED IN THE COHORT,
 9 BECAUSE NIOSH INSISTED ON PUTTING EVERYBODY IN THAT
 10 COHORT THAT EVER WORKED FOR VANDERBILT, EVEN IF THEY ONLY
 11 WORKED FOR ONE HOUR, REGARDLESS OF WHETHER THEY WERE
 12 EXPOSED.

13 SO OBVIOUSLY, THAT WAS SOME SUBJECT OF SOME
 14 -- WHAT WE WOULD CALL INACCURACY; A LITTLE BIT OF
 15 SUSPICION.

16 Q. WERE THERE EVER ANY DISCUSSIONS REGARDING
 17 THE FACT THAT THERE WERE SOME EMPLOYEES THAT WERE EXPOSED
 18 FOR A VERY SHORT DURATION, THAT NIOSH CONCLUDED HAD BEEN
 19 AT RISK AND HAD GOTTEN CANCER DUE TO THAT SHORT EXPOSURE
 20 PERIOD?

21 A. YEAH, THAT WAS ONE OF THEM. THE WORST
 22 EXAMPLE, OF COURSE, IS THE FELLOW WHO COULDN'T POSSIBLY
 23 HAVE BEEN EXPOSED TO TALC, BUT HE WAS ON THE VANDERBILT
 24 PAYROLL. AND WHEN QUESTIONED ABOUT THIS, NIOSH SAID,
 25 "LOOK. WE TAKE EVERYBODY WHO IS ON THE PAYROLL. WE ARE

1 NOT GOING TO GO INTO THE DETAILS." THE FACT THAT HE
2 BUILT -- THE EIGHT DAYS THAT HE WAS ON THE PAYROLL, HE
3 WAS BUILDING -- A CARPENTER BUILDING A SHACK, THAT'S NOT
4 THEIR CONCERN. THEY WANT -- THIS IS --

5 Q. WHO AT NIOSH SAID THAT, SIR?

6 A. MR. DEMENT.

7 Q. MR. JOHN DEMENT SAID THEY WERE GOING TO
8 TAKE EVERYBODY ON THE PAYROLL, REGARDLESS OF WHETHER THEY
9 WERE EXPOSED --

10 A. NO.

11 Q. -- TO TALC?

12 A. HE SAID, WE ARE GOING TO TAKE EVERYBODY
13 THAT'S ON THE PAYROLL, PERIOD.

14 Q. DID HE SAY THAT TO YOU PERSONALLY?

15 A. YES.

16 Q. WHEN WOULD HE HAVE SAID THAT?

17 A. PROBABLY SOMETIME BEFORE 1980, WHEN WE HAD
18 A CHANCE TO LOOK -- HE GAVE ALSO THE DRAFTS, THE ROUGH
19 DRAFTS, AND WE HAD A CHANCE TO LOOK THEM OVER FOR
20 INACCURACIES OR COMMENTS, AND WE GAVE -- THAT WAS ONE OF
21 THE COMMENTS WE GAVE TO THEM:

22 THAT HOW ON EARTH COULD A SCIENTIST IN
23 THEIR COHORT, IN AN IMPORTANT COHORT LIKE THIS, A MAN WHO
24 OBVIOUSLY WAS NEVER EXPOSED -- AND HE SAID, "LOOK. WE
25 HAVE A PROTOCOL, AND THE PROTOCOL IS GOING TO BE

1 FOLLOWED. THE PROTOCOL SAYS EVERYBODY WHO EVER WORKED
2 FOR VANDERBILT. I DON'T CARE IF IT IS ONE HOUR, IT IS
3 GOING TO BE ON THAT LIST."

4 AND HE DID PUT IT ON, AND THAT -- AS YOU
5 CAN IMAGINE, THAT WAS A SUBJECT OF GREAT AMOUNT OF
6 COMMENT ON OUR PART.

7 Q. WAS IT THE SUBJECT OF COMMENT AT THE TIME
8 OF THE RELEASE OF THE FINDINGS, THAT BECAUSE SOME OF THE
9 WORKERS HAD WORKED -- BEEN EXPOSED FOR SUCH A SHORT
10 DURATION TO YOUR TALC, THAT IT PUT THE CREDIBILITY OF THE
11 NIOSH STUDY IN QUESTION?

12 A. YES.

13 Q. OKAY. DURING THOSE CONVERSATIONS, DID
14 ANYONE EVER MENTION TO YOU, TO YOUR KNOWLEDGE, THAT THERE
15 WAS ANOTHER WAY TO LOOK AT THE FACT THAT THERE WAS A
16 SHORT PERIOD OF DURATION, IN THAT IT COULD ALSO BE
17 CONCLUDED THAT A VERY SHORT EXPOSURE TO TALC COULD CAUSE
18 CANCER?

19 A. IF ANYONE STATED THAT, WE WOULD LOOK AT
20 THEM WITH RATHER AN INCREDULOUS LOOK, BECAUSE I DON'T --
21 THERE'S SUCH A THING -- DO YOU KNOW WHAT DOSE RESPONSE
22 IS.

23 Q. YES.

24 A. WELL, TO SCIENTISTS, THAT MEANS SOMETHING,
25 AND WE WOULDN'T KNOW HOW A SCIENTIST COULD DISREGARD A

1 DOSE RESPONSE IN EITHER THIS PARTICULAR STUDY OR ANY
2 OTHER STUDY.

3 Q. BUT TO YOUR KNOWLEDGE, NO ONE CAME TO THE
4 CONCLUSION, BASED ON THIS STUDY, ASIDE FROM ANYBODY FROM
5 NIOSH, THAT SHORT PERIODS OF EXPOSURE TO YOUR TALC COULD
6 INDEED CAUSE CANCER?

7 A. NO ONE CAME TO THAT CONCLUSION, EXCEPT OUR
8 FRIENDS WHO WROTE THAT -- THAT 1980 DOCUMENT. THEY WERE
9 ALONE IN THAT. THAT'S BEEN CRITICIZED BY EVERY
10 EPIDEMIOLOGICAL SCIENTIST IN THE UNITED STATES. THAT
11 DOCUMENT WAS NEVER PEER-REVIEWED OR NEVER GOTTEN -- NEVER
12 BEEN PUBLISHED, COULD NEVER -- THAT DOCUMENT COULD NEVER
13 GO THROUGH A PEER REVIEW. IT WOULD NEVER REACH THE --

14 Q. WHAT DO YOU BASE THAT STATEMENT ON, SIR?

15 A. BECAUSE OF ALL THE CRITICISM THAT
16 PARTICULAR DOCUMENT HAS GOT, FROM LEADING EPIDEMIOLOGISTS
17 THROUGHOUT THIS COUNTRY. WE HAVE GONE TO TABERSHAW, DR.
18 COOPER, DR. WRIGHT, DR. MORGAN, UP IN CANADA. WE HAVE
19 GONE THROUGH THE LIST OF EVERYBODY, TO LOOK AT THIS
20 DOCUMENT, AND YOU GET THE SAME CRITICISM.

21 Q. WHEN DID YOU CONTACT DR. COOPER?

22 A. OH, ABOUT -- THAT WOULD BE ABOUT TWO OR
23 THREE YEARS AFTER THE PUBLICATION -- 1983, 1982, IN THERE
24 SOMEWHERE.

25 Q. WHAT IS DR. COOPER'S FIRST NAME?

1 A. CLARK.

2 Q. AND WHAT WAS THE PURPOSE OF CONTACTING HIM?

3 A. IT WAS TO ASK HIM TO CRITIQUE THE NIOSH
4 DOCUMENT.

5 Q. AND WHEN DID YOU CONTACT DR. WRIGHT?

6 A. ABOUT THE SAME YEAR.

7 Q. WHAT IS DR. WRIGHT'S FIRST NAME?

8 A. GEORGE.

9 Q. AND WHAT WAS THE PURPOSE OF CONTACTING
10 GEORGE WRIGHT?

11 A. IT WAS TO ASK HIM TO CRITIQUE THE NIOSH
12 DOCUMENT.

13 Q. AND DR. MORGAN?

14 A. HE HAD ALREADY CRITIQUED IT. HE EVENTUALLY
15 CRITIQUED IT NOT THROUGH US; HE CRITIQUED IT THROUGH
16 ANOTHER CHANNEL.

17 Q. WHAT OTHER CHANNEL, SIR?

18 A. IT WAS -- HE WAS GIVEN THE DOCUMENTS BY
19 NIOSH, FOR SOME REASON, FROM OSHA -- OSHA, FOR SOME
20 REASON. HE WAS GIVEN SOME DOCUMENTS HAVING TO DO WITH
21 THIS PARTICULAR -- THIS NIOSH DOCUMENT, AND ASKED TO
22 CRITIQUE IT, AND HE DID.

23 Q. WHAT'S DR. MORGAN'S FIRST NAME?

24 A. KEITH.

25 Q. HAVE YOU EVER RETAINED KEITH MORGAN IN ANY

1 OTHER CAPACITY?

2 A. WE DIDN'T RETAIN HIM.

3 Q. HAVE YOU EVER RETAINED HIM?

4 A. NO.

5 Q. HAS ANYONE ON YOUR BEHALF EVER RETAINED
6 HIM?

7 A. NOT TO MY KNOWLEDGE.

8 Q. OKAY. ASIDE FROM THE SMITH STUDY AND THE
9 TABERSHAW STUDY, HAS VANDERBILT COMMISSSIONED ANY OTHER
10 STUDIES TO BE DONE, REGARDING EXPOSURE TO YOUR TALC?

11 A. YES.

12 Q. AND WHAT WOULD THAT BE, SIR?

13 A. THE LAMM STUDY.

14 Q. OKAY. RIGHT.

15 A. DR. STEVEN LAMM.

16 Q. ASIDE FROM THOSE THREE --

17 A. TO THE BEST OF MY KNOWLEDGE, THOSE ARE THE
18 ONLY THREE MEDICAL STUDIES THAT THE VANDERBILT
19 CORPORATION COMMISSSIONED AND PAID FOR.

20 Q. OKAY.

21 A. ALL THE OTHER ONES WERE DONE BY SOMEBODY
22 ELSE.

23 Q. ON YOUR TALC?

24 A. YES.

25 Q. OKAY.

1 A. OR ON AN INGREDIENT IN OUR TALC.

2 Q. ARE YOU FAMILIAR WITH THE NAME OF ROBERT
3 MURRAY AND ASSOCIATES -- ROBERT MURRAY ASSOCIATES?

4 A. YES.

5 Q. AND WHO IS ROBERT MURRAY, SIR?

6 A. HE'S A HEALTH SPECIALIST, OCCUPATIONAL
7 MEDICINE -- OCCUPATIONAL MEDICAL HEALTH SPECIALIST WHO
8 LIVES IN ENGLAND. I BELIEVE HE HAS HIS OWN CONSULTING
9 FIRM, MURRAY AND ASSOCIATES.

10 Q. AND WHEN WAS THE FIRST TIME YOU HAD ANY
11 COMMUNICATIONS WITH ROBERT MURRAY?

12 A. ABOUT SIX OR SEVEN YEARS AGO. HE -- YEAH,
13 SEVEN OR EIGHT YEARS AGO.

14 Q. AND WHAT WAS THE SUBSTANCE OF THAT
15 COMMUNICATION, SIR?

16 A. I AM TRYING TO REMEMBER JUST EXACTLY --
17 CONTACTED HIM FOR TWO THINGS, AND I AM JUST TRYING TO
18 FIGURE OUT WHICH ONE WAS FIRST.

19 I BELIEVE THE FIRST TIME WE CONTACTED HIM
20 WAS A CRITIQUE OF THE NIOSH DOCUMENT.

21 Q. AND WHAT WAS IT EXACTLY YOU WISHED ROBERT
22 MURRAY TO DO?

23 A. TO CRITIQUE THE DOCUMENT. THAT'S THE
24 STANDARD WORD THAT CAN BE USED, WITHOUT EXPLANATION.

25 Q. THE SAME TYPE OF CRITIQUE THAT TABERSHAW

1 HAD DONE?

2 A. NO, NO. TABERSHAW -- WELL, YES, TABERSHAW
3 AND WRIGHT AND COOPER AND MORGAN.

4 MS. EISENSTEIN: OKAY. WE HAVE BEEN GOING NOW FOR
5 OVER AN HOUR. WOULD YOU LIKE TO TAKE A QUICK BREAK?

6 MR. BENDER: FINE. I WANT TO CONCLUDE IT TODAY, IF
7 THAT'S --

8 MS. EISENSTEIN: OKAY. LET'S TAKE A TWO-MINUTE
9 BREAK.

10 (A BREAK WAS TAKEN AT THIS TIME.)

11 MS. EISENSTEIN: LET'S GO BACK ON THE RECORD.

12 Q. SIR, I AM GOING TO PRESENT YOU WITH A
13 DOCUMENT OF ONE, TWO -- SIX PAGES. THE FIRST PAGE --
14 IT'S ON THE STATIONARY OF ROBERT MURRAY ASSOCIATES, AND
15 THE FIRST PAGE APPEARS TO BE A LETTER TO YOU. WHY DON'T
16 YOU TAKE A LOOK AT IT (INDICATING).

17 MR. MACAULEY: THAT'S PLAINTIFF'S 4?

18 MS. EISENSTEIN: YES.

19 (WHEREUPON, THE DOCUMENT REFERRED TO
20 WAS MARKED AS PLAINTIFFS' EXHIBIT 4 FOR
21 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
22 ATTACHED HERETO.)

23 THE WITNESS: WE ARE FINISHED.

24 MR. BENDER: THERE'S SOMETHING MISSING ON IT.

25 MS. EISENSTEIN: IS THERE?

1 MR. BENDER: YEAH. THERE'S A PAGE MISSING, AT
2 LEAST. IT ENDS WITH A COMMA AND TWO WORDS.

3 MS. EISENSTEIN: RIGHT. THAT'S ALL I HAVE TOO.

4 THE WITNESS: OKAY. I HAVE READ IT.

5 BY MS. EISENSTEIN:

6 Q. OKAY. SIR, LET'S JUST TALK FOR A MOMENT
7 ABOUT THE FIRST PAGE.

8 A. YES.

9 Q. DO YOU REMEMBER RECEIVING A LETTER ON OR
10 ABOUT THE 18TH OF DECEMBER, 1980, FROM DR. ROBERT MURRAY?

11 A. YES.

12 Q. DOES THIS APPEAR TO BE THE LETTER YOU
13 RECEIVED?

14 A. YES.

15 Q. OKAY. DR. MURRAY STATES IN THIS LETTER
16 THAT: "AS REQUESTED BY TABERSHAW OCCUPATIONAL MEDICINE
17 ASSOCIATES, I ATTACH HERewith MY COMMENTS ON THE TOMA
18 REPORT, ET CETERA -- WELL -- ON LUNG CANCER MORTALITY AT
19 THE GOUVERNEUR MINE."

20 A. UH-HUH.

21 Q. DID TABERSHAW REQUEST THAT DR. MURRAY
22 EXAMINE THE REPORT?

23 A. WE MADE OUR ORIGINAL CONTACT TO DR. MURRAY
24 THROUGH DR. TABERSHAW, AND DR. TABERSHAW SUGGESTED HIM AS
25 A POSSIBLE REVIEWER OF THE NIOSH DOCUMENT. SO THEREFORE,

1 IT SOUNDS LOGICAL THAT TABERSHAW WOULD HAVE MADE THE
2 INITIAL CONTACT, WHICH APPARENTLY IS TRUE, ACCORDING TO
3 THIS PARAGRAPH.

4 Q. WAS IT YOUR UNDERSTANDING THAT TABERSHAW
5 WAS GOING TO CONTACT ROBERT MURRAY?

6 A. YES. I SPOKE TO HIM ON THE TELEPHONE ABOUT
7 IT.

8 Q. TABERSHAW?

9 A. YES.

10 Q. DID YOU EVER SPEAK DIRECTLY TO ROBERT
11 MURRAY ABOUT IT?

12 A. I DON'T REMEMBER.

13 Q. HAVE YOU EVER SPOKEN PERSONALLY TO DR.
14 MURRAY?

15 A. YES.

16 Q. OKAY. WHEN WAS THE FIRST TIME YOU WOULD
17 HAVE SPOKEN TO HIM?

18 A. WITHIN THE YEAR PRIOR TO -- AROUND ABOUT
19 THIS TIME, WHICH WOULD BE THE 18TH OF DECEMBER, 1980.
20 EITHER JUST BEFORE OR JUST AFTER.

21 Q. AND HOW DID YOU COME TO BE AWARE OF DR.
22 MURRAY?

23 A. THROUGH DR. TABERSHAW, AS I HAVE SAID.

24 Q. IT SAYS, IN THE FIRST SENTENCE HERE, THAT
25 AS REQUESTED BY TABERSHAW TO REVIEW THE TOMA REPORT. YOU

1 SAID THEY WERE REQUESTED TO REVIEW THE NIOSH REPORT?

2 A. WELL, THAT'S TRUE, BUT PART OF THIS -- THE
3 TOMA REPORT WAS THE NIOSH REPORT, AND IF YOU LOOK ON DOWN
4 FURTHER, THE WHOLE THING HAS TO DO WITH THE NIOSH
5 REPORT. SO THIS IS NOT EXACTLY ACCURATE.

6 THE NIOSH AND TOMA REPORTS WERE -- HE WAS
7 ASKED TO REVIEW BOTH THE NIOSH AND THE TOMA REPORT, AND
8 THE MAIN PART WAS TO GET THE NIOSH REPORT IN, AND SINCE
9 THE TOMA REPORT, WE KNEW, WOULD BE -- AS WE MENTIONED
10 BEFORE, IT WAS SOMEWHAT OF A CRITIQUE OF THE NIOSH
11 REPORT, IT GOES -- STANDS TO REASON THAT DR. MURRAY WOULD
12 GET BOTH REPORTS.

13 Q. DO YOU HAVE PERSONAL KNOWLEDGE OF DR.
14 MURRAY RECEIVING BOTH REPORTS TO CRITIQUE?

15 A. YES, I DO.

16 Q. OKAY. SO IT IS YOUR UNDERSTANDING THAT DR.
17 MURRAY SAW MORE THAN JUST THE TOMA REPORT?

18 A. IT IS MY UNDERSTANDING HE SAW BOTH THE
19 NIOSH REPORT AND THE TOMA REPORT.

20 Q. OKAY. HOW MANY CRITIQUES OF THE NIOSH
21 REPORT DID VANDERBILT ELICIT?

22 A. I THINK -- LET'S SEE. LAMM CRITIQUED IT.
23 DR. LAMM, SEPARATE FROM HIS -- HIS STUDY.

24 Q. WAS THE OTHER STUDY AN EPIDEMIOLOGICAL --

25 A. SEE -- YEAH. LAMM DID A FOLLOW-UP

1 EPIDEMIOLOGY STUDY; WE WENT ALL THROUGH THAT.

2 Q. RIGHT. THAT'S SEPARATE FROM HIS CRITIQUE?

3 A. YEAH; BUT HE DID DO A CRITIQUE.

4 Q. OKAY. AT VANDERBILT'S SUGGESTION?

5 A. AT VANDERBILT'S SUGGESTION, YES.

6 Q. OKAY.

7 A. UNSOLICITED BY VANDERBILT WAS THE CRITIQUE
8 BY ONE OF THE ORIGINAL AUTHORS OF THE NIOSH REPORT, DR.
9 GAMBLE.

10 Q. I AM ASKING YOU, AT THIS POINT, JUST THE
11 ONES THAT VANDERBILT SOLICITED.

12 A. YOU HAVE GOT ALL THOSE NOW, I BELIEVE.

13 Q. OH. YOU THINK WE HAVE DISCUSSED --

14 A. I THINK THAT'S ALL THERE IS. I CAN'T
15 REMEMBER ANY MORE THAT WE SOLICITED. I THINK THAT'S IT.

16 Q. OKAY.

17 A. LET ME ADD ONE -- I JUST REMEMBERED
18 ANOTHER.

19 Q. ANOTHER CRITIQUE SOLICITED BY VANDERBILT?

20 A. YES. AN IMPORTANT ONE.

21 Q. SORRY?

22 A. AN IMPORTANT ONE.

23 Q. WHAT'S THAT, SIR?

24 A. THE DUNN REPORT.

25 Q. IT'S NOT MILTON DUNN, IS IT?

1 A. NO.

2 Q. DO YOU KNOW OF A MILTON DUNN?

3 A. NO, I DON'T.

4 Q. OH. OKAY.

5 A. THE NAME IS DR. JAMES DUNN, OF DUNN
6 GEOSCIENCE, AND THAT CRITIQUES THE INDUSTRIAL HYGIENE
7 PORTION OF THE NIOSH DOCUMENT. THAT IS THE ALLEGATION
8 THAT THERE'S ASBESTOS -- I FORGOT THAT ONE. THAT WAS
9 COMMISSIONED BY THE VANDERBILT COMPANY.

10 Q. WHEN WAS THAT COMMISSIONED?

11 A. APPROXIMATELY THREE YEARS AGO, FOUR YEARS
12 AGO.

13 MR. BENDER: I'M SORRY. I WAS THINKING: WHILE YOU
14 ARE LOOKING, SHE CAN BE MARKING THAT FOR IDENTIFICATION.

15 MS. EISENSTEIN: LET'S GO OFF THE RECORD THEN FOR
16 JUST --

17 (DISCUSSION ENSUED OFF THE RECORD.)

18 BY MS. EISENSTEIN:

19 Q. HAS DR. TABERSHAW EVER BEEN RETAINED BY
20 VANDERBILT FOR ANY OTHER PURPOSE OTHER THAN TO DO THE
21 STUDY WE HAVE DISCUSSED?

22 A. YES.

23 Q. AND IN WHAT OTHER CAPACITY HAS DR.
24 TABERSHAW BEEN RETAINED BY VANDERBILT?

25 A. TO ACT AS THEIR MEDICAL CONSULTANT.

1 Q. AND AS VANDERBILT'S MEDICAL CONSULTANT, IS
2 HE A FULL-TIME EMPLOYEE?

3 A. HE'S HAD -- HE NO LONGER IS ANYTHING -- LET
4 ME PUT IT THAT WAY -- WITH US. HE'S RETIRED. AT THE
5 TIME --

6 Q. PRIOR TO RETIREMENT?

7 A. PRIOR TO RETIREMENT, WHEN WE RETAINED HIM,
8 WE RETAINED ACTUALLY HIS FIRM, WHICH WAS THE TOMA --
9 TABERSHAW OCCUPATIONAL MEDICINE ASSOCIATES, AND IT WAS
10 THAT FIRM THAT WE RETAINED AS OUR MEDICAL CONSULTANTS,
11 RATHER THAN AN INDIVIDUAL NAMED DR. TABERSHAW.

12 OF COURSE DR. TABERSHAW WAS THE FIRST ONE
13 WE APPROACHED, NATURALLY, WHEN WE WANTED TO GET SOMEONE
14 TO DO THE EPIDEMIOLOGY STUDY.

15 Q. HAS DR. TABERSHAW PERSONALLY ACTED IN ANY
16 OTHER CAPACITY WITH VANDERBILT, OTHER THAN THE STUDY?

17 A. OTHER THAN THE STUDY, AND OTHER THAN THE
18 MEDICAL CONSULTING WORK?

19 Q. SO HE PERSONALLY WAS THE MEDICAL
20 CONSULTANT, AND NOT HIS -- HIS -- IT WAS HIS CONSULTING
21 FIRM; IS THAT CORRECT?

22 A. YEAH, WE USED HIS CONSULTING FIRM. ON
23 OCCASION, WE HAVE USED HIM ALL ALONE AS OUR CONSULTANT.

24 Q. LET'S TALK ABOUT USING -- THE TIMES THAT
25 HE'S BEEN USED PERSONALLY. HOW MANY TIMES HAVE YOU USED

1 -- HAS VANDERBILT USED DR. TABERSHAW IN SOME SORT OF
2 PERSONAL CAPACITY AS A MEDICAL CONSULTANT?

3 A. AT LEAST TWICE.

4 Q. AND WHEN WOULD THE FIRST TIME HAVE BEEN,
5 SIR?

6 A. THE FIRST TIME WOULD BE IN 1975, WHEN WE
7 FIRST SAT DOWN WITH THE NIOSH PEOPLE IN MORGANTOWN, WEST
8 VIRGINIA, SOME OF WHOM WERE AUTHORS OF THE FINAL REPORT,
9 AND DISCUSSED THE PROTOCOL OF THE NIOSH STUDY TO BE TAKEN
10 -- TO BE UNDERTAKEN AT GOUVERNEUR TALC COMPANY.

11 Q. THE PROCEDURES THEY WERE GOING TO USE?

12 A. YES.

13 Q. OKAY.

14 A. THAT WAS HIS FIRST TRIP AS A CONSULTANT.

15 Q. AND WAS HE PAID FOR HIS --

16 A. YES.

17 Q. -- TIME? SEPARATELY, FROM THE STUDY HE
18 ENDED UP DOING?

19 A. YEAH. IT WAS -- IN EFFECT, THAT WAS THE
20 START OF THE STUDY, RIGHT THERE.

21 Q. OKAY. BUT HE WAS INITIALLY JUST BROUGHT IN
22 TO CONSULT FOR THAT PARTICULAR MEETING?

23 A. YES. HE HAD -- YES.

24 Q. OKAY.

25 A. AND AT THAT TIME, I HAD -- IF I DIDN'T TELL

1 HIM AT THE TIME, IN MY MIND, I WAS GOING TO HAVE HIM DO
2 THAT STUDY. THAT'S WHY I WANTED HIM THERE AT THAT
3 MEETING, OBVIOUSLY.

4 Q. OKAY. WHAT WAS THE SECOND TIME?

5 A. WE WENT BACK TO TALK TO THE NIOSH PEOPLE IN
6 CINCINNATI ABOUT THE STUDY BEFORE IT WAS PUBLISHED --
7 NO. MAYBE IT WAS AFTER -- AFTER IT WAS PUBLISHED;
8 PROBABLY IN 1981 OR 1982, IN THERE SOMETIME, AND HE WENT
9 ALONG WITH MR. RIEGER AND MYSELF TO DISCUSS WITH MR.
10 BROWN THE STUDY THAT THEY HAD PUBLISHED.

11 Q. AND WHAT WAS THE PURPOSE OF THAT TRIP?

12 A. THE PURPOSE OF THE TRIP WAS TO SUGGEST TO
13 THE NIOSH PEOPLE -- SEE IF WE COULD GET THEM INTERESTED
14 IN HAVING A REVIEW PANEL FOR THE NIOSH STUDY. SEE IF WE
15 COULD GET BACKING. HAVE THE PANEL CRITIQUED BY -- WITHIN
16 THE COMMUNITY OF -- OF OCCUPATIONAL MEDICINE PEOPLE IN
17 THE UNITED STATES.

18 Q. AND MR. -- I MEAN DR. TABERSHAW WENT ALONG
19 AS YOUR MEDICAL CONSULTANT?

20 A. YES.

21 Q. OKAY. ARE THOSE THE ONLY TWO TIMES HE HAS
22 ACTED IN ANY SORT OF PERSONAL CAPACITY FOR VANDERBILT?

23 A. THE ONLY TWO TIMES I CAN REMEMBER, OVER A
24 PERIOD OF MANY YEARS.

25 Q. HOW MANY TIMES HAS TABERSHAW AND

1 ASSOCIATES, AS A CONSULTING FIRM, WORKED FOR VANDERBILT?

2 A. WELL, SOME OF THEIR PEOPLE, AS PART OF THE
3 CONTRACT WE HAD WITH THEM, DID SOME SURVEYS OF OUR
4 CHEMICAL MANUFACTURING OPERATIONS, WHICH WERE IN MURRAY,
5 KENTUCKY AND BETHEL, CONNECTICUT.

6 THEY ALSO WENT TO THE GOUVERNEUR LOCATION
7 WITH THEIR MEDICAL TEAM TO DO MORE -- THE MEDICALS THAT
8 ARE PART OF THE MORBIDITY STUDY, AND THEN EVEN BEYOND
9 THAT, AFTER THE MORBIDITY STUDY WAS FINISHED, THEY
10 CONTINUED ON TAKING OVER OUR MEDICAL PROGRAM FROM WHERE
11 IT WAS, UP UNTIL THEY CAME INTO THE SITUATION.

12 Q. I AM CONFUSED WHEN YOU SAY WHEN THEY CAME
13 INTO THE SITUATION. ARE YOU REFERRING TO A STUDY THAT
14 THEY ENDED UP DOING?

15 A. YES.

16 Q. OKAY. SO THEY RAN A MEDICAL PROGRAM FOR
17 VANDERBILT PRIOR TO HARTFORD'S MEDICAL --

18 A. WELL, HARTFORD'S WAS NOT A MEDICAL PROGRAM.

19 Q. HARTFORD'S WAS WHAT, SIR?

20 A. AN INDUSTRIAL HYGIENE PROGRAM, WHICH I SAID
21 TO YOU BEFOREHAND, WHICH IS NOT -- IS NOT A MEDICAL
22 PROGRAM.

23 Q. WHAT DO YOU MEAN WHEN YOU SAY, "MEDICAL
24 PROGRAM"?

25 A. WELL, THE MEDICAL PROGRAM IS LOOKING AFTER

1 THE HEALTH OF YOUR WORKERS, AND THAT'S -- THAT'S SOMEWHAT
2 ACCEPTED AS BEING SEPARATE FROM INDUSTRIAL HYGIENE. THEY
3 WORK TOGETHER, MIND YOU, BUT THERE'S TWO SEPARATE PARTS
4 TO IT, JUST LIKE THERE'S THREE PARTS TO AN
5 EPIDEMIOLOGICAL STUDY, MORBIDITY, MORTALITY, MORBIDITY,
6 WHICH IS WHERE YOU LOOK AT THE HEALTH OF THE PEOPLE; AND
7 OVER HERE IS YOUR INDUSTRIAL HYGIENE, BUT THOSE TWO
8 AREN'T TOGETHER (INDICATING).

9 Q. OKAY. SO ARE YOU SAYING THAT -- IN WHAT
10 CAPACITY DID TABERSHAW AND ASSOCIATES HANDLE THE MEDICAL
11 PROGRAM? WHAT ASPECT WAS LEFT TO THEM? THE HEALTH AND
12 SAFETY OF THE WORKERS?

13 A. HEALTH; NOT THE SAFETY.

14 Q. HEALTH? AND THE INDUSTRIAL HYGIENE WAS
15 LEFT -- WAS HANDLED BY HARTFORD?

16 A. AT THAT TIME.

17 Q. OKAY. WHEN DID TABERSHAW AND ASSOCIATES
18 FIRST BECOME EMPLOYED IN THAT CAPACITY?

19 A. THEY FIRST DID THEIR HEALTH STUDIES AS PART
20 OF THEIR -- OF THE EPIDEMIOLOGY STUDY. THAT ENTAILS THE
21 SAME THING: TAKING X-RAYS AND WHATNOT. AND THAT WOULD
22 BE -- THEY STARTED THAT WORK AROUND 19 -- THEY ACTUALLY,
23 STARTED ACTUALLY WITH THE HANDS-ON TYPE OF WORK ABOUT
24 1977, 1978, IN THERE.

25 Q. DID THEY --

1 A. AND THEN AFTER THEY FINISHED THAT, WHICH
2 THEY DID ONE -- THEY DID IN ONE PERIOD OF TIME, SAY A
3 WEEK OR TWO WEEKS OR A MONTH, THEN WE SAID, "WE WOULD
4 LIKE TO RETAIN YOU ON AN ANNUAL BASIS TO COME BACK NEXT
5 YEAR AND DO THE SAME THING THAT YOU DID THIS YEAR, EXCEPT
6 THAT THIS YEAR, YOU ARE USING THAT DATA FOR THE MORBIDITY
7 STUDY."

8 NEXT YEAR, THE SAME DATA IS COLLECTED, BUT
9 IT GOES INTO THE RECORDS, WHICH IS PART OF THE OVERALL
10 VANDERBILT PROGRAM THAT WE HAVE HAD SINCE 1948, GETTING
11 MORE SOPHISTICATED, OF COURSE, AS WE MOVE ALONG, TO LOOK
12 AFTER THE SAFETY AND HEALTH OF OUR WORKERS.

13 Q. WHEN YOU SAY, "RECORDS", WHAT ARE YOU
14 REFERRING TO?

15 A. ALL THE DATA THAT'S COLLECTED, THAT'S PUT
16 INTO THE -- THE INDIVIDUAL'S RECORD.

17 Q. EACH INDIVIDUAL EMPLOYEE?

18 A. YES.

19 Q. AND WHERE ARE THOSE RECORDS KEPT?

20 A. IN GOUVERNEUR.

21 Q. WHERE EXACTLY? WHAT OFFICE?

22 A. NO. THEY ARE IN THE HANDS OF OUR -- OUR
23 COMPANY -- NOT COMPANY DOCTOR. THE DOCTOR THAT'S -- THAT
24 WE HAVE ENGAGED TO LOOK AFTER THE HEALTH -- TO LOOK OVER
25 THE RECORDS, THE HEALTH RECORDS, AND THE DATA THAT'S

1 GATHERED ON OUR PEOPLE.

2 Q. WHO WOULD THAT DOCTOR BE, SIR?

3 A. I HAVE FORGOTTEN WHAT HIS NAME IS; WE HAVE
4 A NEW ONE NOW.

5 Q. ARE THOSE RECORDS KEPT ON THE VANDERBILT
6 PREMISES?

7 A. I DON'T THINK SO.

8 Q. ARE THEY KEPT AT THIS DOCTOR'S OFFICE?

9 A. THEY SHOULD BE, YES.

10 Q. SO IF YOU WANTED TO SEE THOSE RECORDS, WHAT
11 WOULD YOU DO?

12 A. I WOULD HAVE TO GO TO THE INDIVIDUAL WHOSE
13 RECORDS THEY ARE AND GET HIS PERMISSION.

14 Q. OKAY. AND HOW WOULD YOU FIND OUT WHO THAT
15 INDIVIDUAL IS?

16 A. WELL, GO BACK OVER --

17 Q. OH. YOU MEAN INDIVIDUAL -- THE EMPLOYEE?

18 A. THE EMPLOYEE.

19 Q. OKAY. IF YOU WANTED TO FIND OUT TODAY WHO
20 THE DOCTOR WAS THAT DID THESE REPORTS, OR MAINTAINED
21 THESE FILES, HOW WOULD YOU FIND OUT?

22 A. MAINTAINED WHEN?

23 Q. IT'S MY UNDERSTANDING THAT WE ARE TALKING
24 ABOUT THE PRESENT TIME. ARE WE?

25 A. YES. AND THERE'S A DOCTOR UP THERE WHOSE

1 NAME ESCAPES ME.

2 Q. IF YOU WANTED TO FIND OUT HIS NAME, WHERE
3 WOULD YOU GO?

4 A. WHERE WOULD I GO? I WOULD PROBABLY ASK
5 PAUL, BECAUSE HE PROBABLY REMEMBERS; I DON'T.

6 Q. SO IT WOULD BE VERY -- YOU COULD FIND OUT
7 THROUGH ASKING PAUL VANDERBILT?

8 A. YES.

9 (MR. NISHIMURA HAS NOW LEFT THE DEPOSITION ROOM.)

10 BY MS. EISENSTEIN:

11 Q. YOU MENTIONED EARLIER A CONTRACT WITH
12 TABERSHAW AND ASSOCIATES?

13 A. YES.

14 Q. WHAT DOES -- IS THERE A WRITTEN CONTRACT
15 THAT YOU HAVE WITH THEM?

16 A. THERE WAS.

17 Q. THERE WAS?

18 A. WE NO LONGER HAVE THAT. FOR A PERIOD OF
19 ABOUT THREE OR FOUR YEARS, WE HAD A WRITTEN CONTRACT.
20 THREE OR FOUR OR FIVE YEARS, WE HAD A WRITTEN CONTRACT
21 WITH THEM.

22 Q. WHAT YEARS WOULD THOSE HAVE BEEN?

23 A. APPROXIMATELY 1978 TO 1982.

24 Q. OKAY. AND WHAT WAS THE SUBSTANCE OF THAT
25 CONTRACT?

1 A. ESSENTIALLY, FOR THAT -- TOMA TO CONDUCT AN
2 ANNUAL HEALTH PROGRAM FOR THE VANDERBILT CORPORATION.

3 Q. OKAY. AND ASIDE FROM THE HEALTH PROGRAM,
4 HAS TOMA BEEN RETAINED FOR ANY OTHER PURPOSES BY
5 VANDERBILT?

6 A. NOT TO MY KNOWLEDGE.

7 Q. OKAY. HAS DR. TABERSHAW EVER BEEN RETAINED
8 AS AN EXPERT FOR PURPOSES OF LITIGATION?

9 A. NOT TO MY KNOWLEDGE.

10 Q. HAS HE EVER REVIEWED FILES FOR LITIGATION?

11 A. NOT TO MY KNOWLEDGE.

12 Q. OKAY. HAS HE EVER TESTIFIED ON
13 VANDERBILT'S BEHALF IN FRONT OF ANY -- IN FRONT OF ANY
14 BOARD?

15 A. NOT TO MY KNOWLEDGE.

16 Q. OKAY. SIR, AS YOU SIT HERE TODAY, ARE YOU
17 AWARE OF ANY WORKERS' COMPENSATION CLAIMS EVER HAVING
18 BEEN FILED AGAINST VANDERBILT BY ANY OF ITS EMPLOYEES?

19 A. ANY OF --

20 Q. I WILL NARROW IT TO ANY EMPLOYEES, ANY
21 TALC-MINING EMPLOYEES.

22 A. GOUVERNEUR TALC COMPANY EMPLOYEES?

23 Q. YES.

24 A. YES, I AM.

25 Q. WHEN WAS THE FIRST TIME YOU BECAME AWARE OF

1 WORKERS' COMPENSATION CLAIMS MADE BY THOSE EMPLOYEES?

2 A. I DON'T REMEMBER.

3 Q. WOULD IT HAVE BEEN IN -- WHEN YOU FIRST
4 CAME TO THE COMPANY?

5 A. NO.

6 Q. WOULD IT --

7 A. IT WOULD HAVE BEEN -- THAT WAS 35 YEARS
8 AGO.

9 MR. BENDER: COUNSEL, YOUR INQUIRY IS AS BROAD AS
10 THE WORLD.

11 THE WITNESS: IT WOULD BE SOMEWHERE WITHIN THE LAST
12 FIFTEEN YEARS.

13 BY MS. EISENSTEIN:

14 Q. THE LAST FIFTEEN YEARS?

15 A. (NO AUDIBLE RESPONSE.)

16 MR. BENDER: CAN YOU LIMIT IT TO ANYTHING? SOMEONE
17 COULD HAVE TRIPPED AND FALLEN, AND --

18 MS. EISENSTEIN: WE DID LIMIT IT; WE LIMITED IT TO
19 TALC MINERS;.

20 MR. BENDER: TALC MINERS CAN SLIP AND FALL, AND --
21 DO YOU STILL WANT TO KNOW ABOUT THAT?

22 BY MS. EISENSTEIN:

23 Q. SIR, WHEN WAS THE FIRST TIME YOU BECAME
24 AWARE OF A TALC MINER OR MILLER FILING A WORKERS'
25 COMPENSATION CLAIM AGAINST VANDERBILT, IN WHICH THEY

1 ALLEGED THAT THEIR INJURY WAS CAUSED BY EXPOSURE TO THE
2 TALC?

3 A. I CAN'T REMEMBER WHEN THAT WAS, FIRST.

4 Q. WOULD THAT HAVE BEEN MORE THAN TEN YEARS
5 AGO?

6 A. NO.

7 Q. NO?

8 A. NO. IT WOULD BE SOMETHING LESS THAN TEN
9 YEARS AGO AND SOMETHING MORE THAN THREE YEARS AGO.
10 BETWEEN THREE AND TEN YEARS AGO.

11 Q. OKAY. AND HOW MANY OF THESE CLAIMS ARE YOU
12 AWARE OF, AS YOU SIT HERE TODAY?

13 A. I HAVE NO IDEA.

14 Q. MORE THAN TWO?

15 A. I HAVE NO IDEA.

16 Q. OKAY. DO YOU KNOW WHAT THE RESOLUTION OF
17 ANY OF THESE CLAIMS WERE?

18 A. NO, I DON'T KNOW THAT EITHER. THAT'S NOT
19 AN AREA THAT I AM INVOLVED IN.

20 Q. HAVE YOU EVER BEEN INVOLVED IN THE AREA OF
21 WORKERS' COMPENSATION CLAIMS --

22 A. NO.

23 Q. -- AGAINST VANDERBILT?

24 A. HUH-UH.

25 Q. OKAY. SIR, I AM GOING TO HAND YOU A

1 TWO-PAGE DOCUMENT WHICH IS DATED NOVEMBER 4, 1976, AND ON
2 THE LEFT-HAND SIDE, IT STATES, "REPORT OF CALL AT
3 SYRACUSE", AND IT'S UNDERLINED. WOULD YOU EXAMINE THIS,
4 PLEASE (INDICATING).

5 A. UH-HUH.

6 MR. MACAULEY: THAT'S PLAINTIFF'S 5?

7 MS. EISENSTEIN: YES.

8 (WHEREUPON, THE DOCUMENT REFERRED TO
9 WAS MARKED AS PLAINTIFFS' EXHIBIT 5 FOR
10 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
11 ATTACHED HERETO.)

12 MS. EISENSTEIN: WAIT, SIR. I'M SORRY; I GAVE YOU
13 MY COPY. LET ME HAVE THAT BACK. I WILL GET YOU YOUR OWN
14 COPY.

15 WELL, WHY DON'T YOU LOOK AT MY COPY.

16 THE WITNESS: OKAY.

17 MR. BENDER: I HAVE TO MAKE AN OBSERVATION: I
18 BELIEVE THIS IS AN ATTEMPT BY PLAINTIFF TO BRING INTO THE
19 LITIGATION EVIDENCE OF CNA INSURANCE COMPANY, BECAUSE
20 THIS IS UNDOUBTEDLY A CNA REPORT, I WOULD OBJECT TO IT ON
21 THAT GROUND, AND ON THE SAME GROUNDS I HAVE BEEN
22 OBJECTING TO EVERYTHING SO FAR, THAT'S BEEN PRODUCED BY
23 COUNSEL FOR PLAINTIFF, AS BEING IRRELEVANT TO THE ISSUES
24 INVOLVED IN OUR LITIGATION, SINCE THEY ALL CONCERN LUNG
25 CANCER, AND WHICH THE DECEDENT, MRS. SCHWARTZ, DID NOT

1 DIE FROM, ACCORDING TO PLAINTIFFS.

2 MS. EISENSTEIN: COUNSEL, I HAVE FOUND ANOTHER
3 COPY. I AM GOING TO GIVE THAT ONE TO YOU. IF YOU WOULD
4 LIKE TO CHECK TO MAKE SURE THEY ARE THE SAME --

5 MR. BENDER: WHATEVER.

6 BY MS. EISENSTEIN:

7 Q. SIR, HAVE YOU HAD A CHANCE TO LOOK AT THIS
8 DOCUMENT?

9 A. YES, I HAVE.

10 Q. HAVE YOU EVER SEEN IT BEFORE?

11 A. YES.

12 Q. ARE YOU THE AUTHOR OF THIS DOCUMENT?

13 A. YES.

14 Q. OKAY. ON PAGE 2, THOSE ARE YOUR INITIALS;
15 RIGHT (INDICATING)?

16 A. YES.

17 Q. AND SLB STANDS FOR WHAT?

18 A. MY SECRETARY.

19 Q. AND WHAT'S HER NAME?

20 A. SHARON BERASI, B-E-R-A-S-I.

21 Q. DID YOU -- WHAT WAS THE PURPOSE OF THIS
22 DOCUMENT (INDICATING)?

23 A. REPORT ON THIS MEETING.

24 Q. DID YOU PREPARE THIS IN THE COURSE OF YOUR
25 DUTIES?

1 A. YES.

2 Q. OKAY. APPROXIMATELY AROUND NOVEMBER 4,
3 1976?

4 A. YES.

5 Q. OKAY. WAS IT PREPARED FOR MR. THOMPSON?

6 A. NO. OH. WHEN YOU SAY, "PREPARED FOR", HE
7 -- EITHER ONE OF US OR THE OTHER WRITES A DOCUMENT. I
8 DIDN'T PREPARE IT FOR HIM; IT'S JUST THAT WE AGREED I
9 WOULD PREPARE THE DOCUMENT AND HE WOULD -- OKAY?

10 Q. WERE THE TWO OF YOU PRESENT AT THE SAME
11 MEETING?

12 A. YES.

13 Q. WHO ELSE WAS PRESENT AT THAT MEETING?

14 A. THE PEOPLE LISTED ON THE -- ON THE
15 RIGHT-HAND SIDE HERE: MR. TED ESTERGARD, MR. ROY ORR AND
16 MR. ALAN GOLDBERG.

17 Q. OH, I SEE.

18 A. DO YOU SEE THEM?

19 Q. YES. THEY ARE ON THE RIGHT SIDE?

20 A. YES.

21 Q. OKAY. WHO IS ALAN GOLDBERG?

22 A. IT SAYS RIGHT HERE, "ATTORNEY." I PRESUME
23 THAT'S WHAT HE IS. HE WAS REPRESENTED AS AN ATTORNEY TO
24 ME. I NEVER SAW HIM BEFORE IN MY LIFE.

25 Q. WAS HE AN ATTORNEY -- WAS IT YOUR

1 UNDERSTANDING THAT HE WAS AN ATTORNEY FOR CNA?

2 A. I HAVE NO IDEA WHO HE'S ATTORNEY FOR.

3 Q. HE WAS NOT YOUR ATTORNEY?

4 A. NO.

5 Q. WHO IS ROY ORR?

6 A. I DON'T KNOW WHO THAT WAS; I NEVER SAW HIM
7 BEFORE.

8 Q. WHAT ABOUT TED ESTERGARD?

9 A. I BELIEVE HE'S A CNA INSURANCE MAN, BECAUSE
10 HIS NAME IS FAMILIAR.

11 Q. THEODORE G. ESTERGARD, DOES THAT RING A
12 BELL?

13 A. NO, IT DOESN'T.

14 Q. OKAY. THERE WAS A MEETING HELD BETWEEN
15 YOU, MR. THOMPSON AND THESE THREE INDIVIDUALS; IS THAT
16 CORRECT?

17 A. YES.

18 Q. OKAY. AND WHAT WAS THE PURPOSE OF THE
19 MEETING?

20 A. IT'S HARD FOR ME TO REMEMBER EXACTLY WHY
21 THEY WANTED US UP THERE. I CAN'T -- I CAN'T ANSWER THAT
22 QUESTION.

23 Q. DO YOU BELIEVE THAT DURING THAT MEETING,
24 YOU DISCUSSED A GTC WORKER NAMED FRANCIS BONEY?

25 A. IT'S OBVIOUS FROM THE REPORT THAT THAT'S

1 WHAT WE DID.

2 Q. OKAY. WHEN DID YOU FIRST BECOME AWARE THAT
3 FRANCIS BONEY HAD FILED A WORKERS' COMPENSATION CLAIM
4 AGAINST VANDERBILT?

5 MR. BENDER: I WILL OBJECT TO ALL THIS INQUIRY AS
6 IRRELEVANT AND NOT RELATED TO THE ISSUES IN THIS CASE. I
7 HOPE, IN THE INTEREST OF EXPEDITING, THAT YOU WON'T TAKE
8 LONG, BUT GO AHEAD.

9 THE WITNESS: I DON'T KNOW.

10 BY MS. EISENSTEIN:

11 Q. OKAY. WAS IT PRIOR TO NOVEMBER, 1976?

12 A. I DON'T KNOW IF I EVER HEARD OF HIM, MR.
13 BONEY, BEFORE THIS DATE.

14 Q. BUT YOU HAVE HEARD -- BY THIS DATE, YOU HAD
15 HEARD OF MR. BONEY'S CASE?

16 A. OBVIOUSLY I HAD HEARD OF IT OR I WOULDN'T
17 HAVE BEEN ABLE TO MAKE THE REPORT.

18 Q. LET'S QUICKLY GO THROUGH THE NAMES ON THE
19 LEFT-HAND SIDE. IT SAYS, "CC." WERE COPIES SENT TO
20 THOSE INDIVIDUALS?

21 A. YES.

22 Q. OKAY. DO YOU HAVE ANY REASON TO BELIEVE
23 THAT THOSE INDIVIDUALS DID NOT RECEIVE A COPY OF THIS
24 MEMO?

25 A. NO.

- 1 Q. OKAY. A COPY WAS SENT TO H.B. VANDERBILT?
- 2 A. RIGHT.
- 3 Q. AND AT THAT TIME, WHAT WAS HIS CAPACITY?
- 4 A. HE WAS THE PRESIDENT.
- 5 Q. OKAY. T.T. NOLAND?
- 6 A. YES. EXECUTIVE VICE-PRESIDENT.
- 7 Q. HOW ABOUT FIEDERLEIN?
- 8 A. FIEDERLEIN, CHIEF FINANCIAL OFFICER.
- 9 Q. AND MR. THOMPSON AT THAT TIME WAS WHAT?
- 10 A. MINERALOGIST.
- 11 Q. AND MR. STREITMATTER?
- 12 A. STREITMATTER WAS VICE-PRESIDENT IN CHARGE
- 13 OF MANUFACTURING AND MINING.
- 14 Q. IS HE STILL IN CHARGE OF MANUFACTURING AND
- 15 MINING?
- 16 A. NO.
- 17 Q. DID HE RETIRE?
- 18 A. YES.
- 19 Q. IN THE LAST TWO YEARS?
- 20 A. YES.
- 21 Q. OKAY. HOW ABOUT MR. ERDMAN?
- 22 A. AS I SAID BEFORE, EARLIER, HE'S THE MANAGER
- 23 OF THE GOUVERNEUR TALC COMPANY.
- 24 Q. WAS HE AT THAT TIME?
- 25 A. YES.

1 Q. AND P.B. GIBNEY, JR.?

2 A. A LAWYER.

3 Q. A LAWYER REPRESENTING VANDERBILT?

4 A. YES.

5 Q. OKAY. WAS HE REPRESENTING VANDERBILT IN
6 RELATION TO WORKERS' COMPENSATION CLAIMS?

7 A. HE WAS NOT WORKING -- HE WAS REPRESENTING
8 VANDERBILT IN ANYTHING HAVING TO DO WITH THE TALC
9 SITUATION, WHICH WOULD BE ANYTHING.

10 Q. OKAY. HE WAS DESIGNATED TO WORK ON TALC
11 PROBLEMS?

12 A. HE'S THE PREDECESSOR OF MR. RACE.

13 Q. OKAY. K.S. KARSTEN?

14 A. HE'S THE HEAD OF THE LABORATORY.

15 Q. AND HE WAS IN 1976?

16 A. YES.

17 Q. OKAY. SO AS OF NOVEMBER 4, 1976, YOU WERE
18 AWARE OF A CLAIM OF CANCER MADE AGAINST VANDERBILT?

19 A. YES.

20 Q. OKAY. WHO IS MR. KITTS?

21 A. FORMER EMPLOYEE OF INTERNATIONAL TALC
22 COMPANY.

23 Q. AND WHERE IS HE WORKING NOW?

24 A. I HAVE NO IDEA.

25 Q. DO YOU KNOW WHERE HE WENT AFTER HE LEFT

1 INTERNATIONAL TALC COMPANY?

2 A. NO, I DON'T.

3 Q. WHAT TYPE OF WORK DID HE DO FOR
4 INTERNATIONAL TALC?

5 A. HE WORKED IN THE LABORATORY. AT WHAT, I
6 DON'T KNOW.

7 Q. DO YOU HAVE ANY UNDERSTANDING OF WHAT HIS
8 INVOLVEMENT WAS IN THIS WORKERS' COMPENSATION CASE?

9 A. FROM READING THIS LETTER, I DON'T KNOW WHY
10 HE WOULD BE GIVING TESTIMONY. THAT'S THE ANSWER, I
11 GUESS. I DON'T KNOW WHY HE WOULD BE GIVING TESTIMONY. I
12 DON'T KNOW WHAT HIS INVOLVEMENT WOULD BE, OTHER THAN HE'S
13 INVOLVED.

14 Q. OKAY. COULD YOU TURN TO PAGE 2, PLEASE?
15 DO YOU SEE WHERE YOU SUGGEST THAT DR. TABERSHAW BE
16 CONSULTED?

17 A. UH-HUH.

18 Q. WAS HE?

19 A. I DON'T KNOW.

20 Q. YOU DON'T KNOW?

21 A. (NO AUDIBLE RESPONSE.)

22 Q. WHAT WAS IT THAT YOU BELIEVED MR. TABERSHAW
23 WOULD BE ABLE TO SUPPLY, OR WHAT WAS --

24 A. AT THIS TIME, I HAVE NO IDEA.

25 Q. NO IDEA.

1 I AM GOING TO READ, SIR, THE LAST TWO
2 SENTENCES OF THE MEMO, WHERE IT SAYS: "TO DO THIS THEY
3 NEED TO ESTABLISH THAT LITTLE OR NO ASBESTOS WAS NORMALLY
4 FOUND IN THE ORES MINED AT THE TIME MR. BONEY WAS WORKING
5 FOR GTC. THIS IS WHERE THEY NEED OUR ASSISTANCE."

6 WHAT DOES THAT MEAN, SIR?

7 A. IT MEANS -- OKAY. NOW, THEY ARE CNA, THE
8 INSURANCE COMPANY.

9 Q. JUST LET ME STOP YOU FOR A MOMENT, SIR.
10 I'M SORRY.

11 LET ME JUST, FOR CLARITY'S SAKE, READ THE
12 FIRST SENTENCE PRECEDING THOSE TWO.

13 A. SURE.

14 Q. IT SAYS: "IN SUMMARY, CNA IS MAINLY
15 INTERESTED IN DISASSOCIATING TALCOSIS FROM LUNG CANCER
16 AND, BY INFERENCE, EXPOSURE TO NEW YORK STATE TALCS FROM
17 CARCINOGENICITY."

18 AND THEN YOU HAVE THE TWO SENTENCES.

19 A. YES. OKAY.

20 Q. WHAT DID YOU MEAN BY THOSE LAST TWO
21 SENTENCES, SIR?

22 A. IT'S MORE OR LESS SELF-EXPLANATORY. WE
23 NEED TO ESTABLISH THE FACT THAT WE DON'T HAVE ASBESTOS IN
24 OUR TALCS. WE NEED TO ESTABLISH THE FACT THAT WE DON'T
25 -- SEE, UP UNTIL THAT TIME, WE HAD -- WE HAD MINERAL DATA

1 AND WE HAD GEOLOGICAL DATA, BUT WE NEEDED MORE.

2 THAT'S WHAT I WAS SAYING HERE: WE NEED TO
3 ESTABLISH IT. THE MORE THEY GET, THE BETTER.

4 Q. OKAY. SO THAT'S THE KIND OF ASSISTANCE YOU
5 WERE GOING TO SUPPLY?

6 A. TO CNA, YES. WE WOULD LIKE TO GET DOCUMENT
7 AFTER DOCUMENT. SUCH AS THE DUNN REPORT. YOU DON'T HAVE
8 ASBESTOS IN THOSE TALCS, AND WE NEED TO ESTABLISH THIS,
9 AND IN ORDER TO ESTABLISH SOMETHING LIKE THIS, YOU HAVE
10 TO HAVE AN OVERWHELMING AMOUNT OF EVIDENCE. WELL,
11 EVIDENTLY.

12 Q. SIR, AS YOU SIT HERE TODAY, DO YOU BELIEVE
13 THAT YOUR MINES CONTAIN ASBESTOS?

14 A. I KNOW THEY DON'T.

15 MR. BENDER: EXCUSE ME. I WAS ONLY GOING TO OBJECT
16 TO THE FORM OF YOUR QUESTION, BUT YOU HAVE ASKED HIM, DO
17 THEY CONTAIN ASBESTOS, AND HE SAYS NO. THAT'S -- SO I
18 WILL WITHDRAW THE OBJECTION.

19 BY MS. EISENSTEIN:

20 Q. HAVE YOU EVER BEEN INFORMED THAT -- DO YOU
21 BELIEVE THAT THERE WAS EVER ASBESTOS FOUND AT ANY OF YOUR
22 MINES AT ANY TIME?

23 A. NO.

24 Q. NEVER?

25 A. NEVER.

1 Q. HAVE FIBERS EVER BEEN FOUND AT ANY OF YOUR
2 MINES?

3 MR. BENDER: WHAT DO YOU MEAN BY "FIBERS"?

4 MS. EISENSTEIN: I WOULD LIKE HIS DEFINITION; I
5 BELIEVE HE HAS A DEFINITION.

6 MR. BENDER: NO. WHAT DO YOU MEAN? I WANT TO KNOW
7 WHAT YOU MEAN IN YOUR QUESTION, BY "FIBERS."

8 MS. EISENSTEIN: WELL, IT'S MY UNDERSTANDING THAT
9 -- THAT -- I DON'T WANT TO PUT WORDS IN MR. HARVEY'S
10 MOUTH.

11 Q. AM I CORRECT, SIR, THAT IT IS YOUR POSITION
12 THAT THERE ARE TWO FORMS OF TREMOLITE?

13 A. YES.

14 Q. ONE IS ASBESTIFORM AND ONE IS NOT?

15 A. RIGHT.

16 Q. ONE CONTAINS FIBERS AND ONE DOES NOT?

17 A. ONE IS FIBROUS OR ASBESTIFORM, AND ONE IS
18 NOT.

19 Q. OKAY. THE ONE THAT IS ASBESTIFORM --

20 A. YES.

21 Q. THAT'S WHAT I AM ASKING ABOUT.

22 A. OKAY.

23 Q. HAVE YOU EVER FOUND ANY ASBESTIFORM
24 TREMOLITE AT ANY OF YOUR MINES?

25 A. NO.

1 Q. HAVE YOU EVER FOUND ANY ASBESTIFORM OF ANY
2 TYPE AT ANY OF YOUR MINES?

3 A. NO.

4 Q. HAVE YOU EVER STATED PUBLICLY TO THE
5 CONTRARY?

6 A. STATED --

7 Q. HAVE YOU EVER STATED THAT YOU HAVE, AT ONE
8 TIME, FOUND FIBERS AT YOUR MINE?

9 A. I HAVEN'T, NOT TO MY KNOWLEDGE.

10 Q. HAVE YOU EVER WRITTEN THAT -- WRITTEN IT,
11 DOCUMENTED IT, THAT FIBERS WERE FOUND?

12 A. NOT TO MY KNOWLEDGE.

13 Q. SIR, DID YOU ATTEND THE HEARING THAT'S
14 MENTIONED IN THE LAST PARAGRAPH ON THE FIRST PAGE OF THIS
15 DOCUMENT?

16 A. I DON'T THINK -- NO, I DIDN'T. I AM NOT
17 AWARE OF ATTENDING IT; LET ME PUT IT THAT WAY. AS FAR AS
18 I KNOW, I DIDN'T ATTEND.

19 Q. WHAT WAS THE PURPOSE OF YOUR AGREEING TO
20 ATTEND THE HEARING?

21 A. I DON'T KNOW WHETHER I AGREED TO IT. LET
22 ME SEE. "IT WAS AGREED." THAT MEANS SOMEBODY ELSE
23 AGREED -- IT SAYS RIGHT HERE: "FOR THE PURPOSE OF
24 OBSERVATION, ON THE SECOND LINE OF THAT PARAGRAPH, AND
25 ADVISING MR. GOLDBERG IN ANY WAY THAT MIGHT HELP

1 COUNTERACT KITTS TESTIMONY."

2 SO THAT'S STILL -- THAT'S STATED RIGHT
3 HERE.

4 Q. IS THAT YOUR UNDERSTANDING?

5 A. THAT'S WHY I PUT IT IN HERE. "IT WAS
6 AGREED", BEING A BUNCH OF PEOPLE; A GROUP OF MORE THAN
7 ONE PERSON AGREED THAT I WOULD ATTEND.

8 Q. OKAY. TO MAKE OBSERVATIONS OF THE
9 HEARINGS; RIGHT?

10 A. YES.

11 Q. OKAY. DID DR. THOMPSON ATTEND, TO YOUR
12 KNOWLEDGE?

13 A. I DON'T KNOW WHETHER HE ATTENDED OR NOT.

14 Q. WAS THE INTENT FOR DR. THOMPSON TO TESTIFY
15 AT THIS HEARING?

16 MR. BENDER: DO NOT ANSWER THAT QUESTION.

17 MS. EISENSTEIN: IF YOU KNOW, SIR.

18 MR. BENDER: NO, DON'T ANSWER THAT QUESTION.

19 YOU KNOW THAT'S IMPROPER. NO WITNESS --
20 CERTAINLY IN LAW SCHOOL, YOU LEARN THAT A WITNESS CANNOT
21 TESTIFY AS TO THE INTENT OF SOMEONE ELSE, WHAT IS IN THE
22 MIND OF SOMEONE ELSE.

23 LET'S GET ONTO ANOTHER SUBJECT; THAT'S WHAT
24 YOU ASKED.

25 MS. EISENSTEIN: I AM ASKING IF HE HAS PERSONAL

1 KNOWLEDGE AS TO WHAT THE PURPOSE OF DR. THOMPSON'S
2 ATTENDANCE AT THE HEARING WAS TO BE.

3 THE WITNESS: I DON'T HAVE PERSONAL KNOWLEDGE.

4 MS. EISENSTEIN: OKAY.

5 Q. IT WAS NOT DISCUSSED AT THAT MEETING?

6 A. I DON'T REMEMBER.

7 Q. DO YOU HAVE ANY REASON TO BELIEVE THAT YOUR
8 STATEMENT IN HERE, WHICH SAYS, "ANOTHER DATE WILL BE SET
9 FOR DR. THOMPSON TO PRESENT REBUTTAL AS WELL AS NEW
10 TESTIMONY OF HIS OWN", WAS NOT ACCURATE?

11 MR. BENDER: I WILL OBJECT TO THE FORM OF THE
12 QUESTION AND INSTRUCT THE WITNESS NOT TO ANSWER. I WILL
13 INSTRUCT HIM NOT TO ANSWER IT. GET ON TO SOMETHING
14 THAT'S PROPER INQUIRY.

15 MS. EISENSTEIN: ARE YOU GOING TO FOLLOW YOUR
16 COUNSEL'S INSTRUCTION?

17 MR. BENDER: IT'S ALREADY BEEN STIPULATED BY THE
18 ATTORNEY, SIMON, IN YOUR PRESENCE, AS TO HOW THAT WAS TO
19 BE HANDLED, AND YOU KNOW IT, COUNSEL.

20 THE WITNESS: YES.

21 BY MS. EISENSTEIN:

22 Q. SIR, DO YOU SEE THE NAMES ON THE TOP
23 LEFT-HAND SIDE, THAT WE WENT THROUGH A MOMENT AGO?

24 A. YES.

25 Q. IT SAYS, "CC"?

1 A. YES.

2 Q. DID YOU HAVE ANY CONVERSATIONS REGARDING
3 THIS CASE WITH ANY OF THE PEOPLE ON THAT LIST?

4 A. I CAN'T REMEMBER.

5 Q. DO YOU REMEMBER ANY CONVERSATIONS WITH MR.
6 THOMPSON?

7 A. NO, I DON'T.

8 Q. ASIDE FROM THIS CASE, CAN YOU REMEMBER ANY
9 OTHER WORKERS' COMPENSATION CLAIMS?

10 MR. BENDER: WHAT DO YOU MEAN BY "THIS CASE"?

11 MS. EISENSTEIN: WELL, THIS EVIDENTLY IS --

12 MR. BENDER: DO YOU MEAN THE CASE THAT YOU ARE
13 DEPOSING --

14 MS. EISENSTEIN: NO. REFERENCED IN THIS DOCUMENT
15 THAT WE HAVE BEEN DISCUSSING.

16 THE WITNESS: NOT SPECIFICALLY.

17 BY MS. EISENSTEIN:

18 Q. NOT SPECIFICALLY?

19 A. (NO AUDIBLE RESPONSE.)

20 Q. OKAY. IS THERE SOMEONE AT VANDERBILT THAT
21 WOULD HAVE RESPONSIBILITY FOR KEEPING UP WITH WORKERS'
22 COMPENSATION CLAIMS BEING FILED AGAINST THE COMPANY,
23 KEEPING INFORMED OF THEM?

24 A. YES.

25 Q. WHO WOULD THAT BE?

1 A. THE MANAGER -- THE VICE-PRESIDENT IN CHARGE
2 OF MINING AND MANUFACTURING.

3 Q. WHICH, AT ONE TIME, WAS MR. STREITMATTER?

4 A. STREITMATTER; AND IS NOW MR. HUGH -- H.B.
5 VANDERBILT, JR.

6 Q. DOES THE VICE-PRESIDENT FOR MINING AND
7 MANUFACTURING HAVE A FILE WHERE WORKERS' COMPENSATION
8 CLAIMS, OR ISSUES PERTAINING TO IT, ARE KEPT?

9 A. I DON'T KNOW.

10 Q. IF YOU WANTED TO FIND OUT, WHERE WOULD YOU
11 GO?

12 A. I WOULD GO TO THAT MAN.

13 Q. OKAY.

14 MR. MACAULEY: OFF THE RECORD, PLEASE, A SECOND.

15 (DISCUSSION ENSUED OFF THE RECORD.)

16 BY MS. EISENSTEIN:

17 Q. SIR, I AM GOING TO SHOW YOU A ONE-PAGE
18 DOCUMENT WHICH IS ON THE LETTERHEAD OF IRVING R.
19 TABERSHAW, M.D., AND IT IS ADDRESSED TO THEODORE G.
20 ESTERGUARD, SUPERVISOR, WORKMEN'S COMPENSATION CLAIMS,
21 AND AT THE BOTTOM, IT SAYS, "CC: ALLEN HARVEY."

22 COULD YOU LOOK AT THAT, PLEASE, SIR
23 (INDICATING).

24 MR. MACAULEY: WHAT NUMBER IS THAT? 6?

25 MS. EISENSTEIN: NEXT IN ORDER.

1 (WHEREUPON, THE DOCUMENT REFERRED TO
2 WAS MARKED AS PLAINTIFFS' EXHIBIT 6 FOR
3 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
4 ATTACHED HERETO.)

5 (DISCUSSION ENSUED OFF THE RECORD.)

6 (WHEREUPON, A CONFERENCE OFF THE
7 RECORD TOOK PLACE BETWEEN COUNSEL
8 AND THE WITNESS AT THIS POINT.)

9 MS. EISENSTEIN: COUNSEL -- LET THE RECORD REFLECT
10 THAT COUNSEL IS SPEAKING PRIVATELY WITH THE WITNESS AND
11 APPEARS TO BE COACHING THE WITNESS.

12 MR. BENDER: NO. I HAVE BEEN SPEAKING PRIVATELY
13 WITH HIM, YES, AS MOST LAWYERS DO.

14 MS. EISENSTEIN: SIR, MAY I ASK YOU TO TRADE COPIES
15 WITH ME ONCE AGAIN. YOU CAN COMPARE THEM TO SEE --
16 THANKS.

17 Q. SIR, HAVE YOU READ THIS DOCUMENT
18 (INDICATING)?

19 A. YES, I HAVE.

20 Q. IS THAT YOUR NAME AT THE BOTTOM THERE?

21 A. YES.

22 Q. DO YOU REMEMBER RECEIVING THIS?

23 A. NO, I DON'T.

24 Q. YOU DON'T? OKAY.

25 DO YOU HAVE ANY REASON TO BELIEVE THAT YOU

1 DID NOT RECEIVE THIS?

2 A. NO.

3 Q. DO YOU SEE THE LETTERHEAD? DOES THAT LOOK
4 TO YOU LIKE THE LETTERHEAD OF IRVING TABERSHAW?

5 A. YES.

6 Q. HAVE YOU SEEN THAT LETTERHEAD BEFORE?

7 A. YES.

8 Q. OKAY. COULD YOU LOOK, SIR, AT THE
9 SIGNATURE?

10 A. YES.

11 Q. HAVE YOU SEEN MR. TABERSHAW'S SIGNATURE
12 BEFORE?

13 A. YES.

14 Q. DOES THAT LOOK LIKE HIS SIGNATURE?

15 A. I DON'T KNOW.

16 Q. YOU DON'T KNOW?

17 A. (WITNESS SHAKES HEAD.)

18 Q. OKAY. SIR --

19 MR. BENDER: DON'T ASK ANY MORE QUESTIONS ABOUT IT
20 LIKE THAT, COUNSEL, BECAUSE IT'S NOT -- THERE IS
21 INSUFFICIENT FOUNDATION, AND THERE WILL BE NO FURTHER
22 INQUIRY CONCERNING ANY CONTENTS.

23 MS. EISENSTEIN: COUNSEL, I FIND IT OFFENSIVE THAT
24 YOU WILL TELL ME, IN ADVANCE OF A QUESTION, NOT TO ASK
25 ANY MORE QUESTIONS, AND I WILL ASK YOU NICELY NOT TO DO

1 THAT.

2 MR. BENDER: WELL --

3 BY MS. EISENSTEIN:

4 Q. SIR, DID YOU KNOW THAT DR. TABERSHAW HAD
5 BEEN CONTACTED IN REGARD TO THE BONEY CASE?

6 A. I CAN'T REMEMBER.

7 Q. DO YOU HAVE ANY REASON TO DOUBT THAT YOU
8 SUGGESTED DR. TABERSHAW BE THE ONE CONTACTED?

9 MR. BENDER: OBJECTION. IMPROPER INQUIRY.
10 INSTRUCT THE WITNESS NOT TO ANSWER. ASSUMING FACTS NOT
11 IN EVIDENCE.

12 BY MS. EISENSTEIN:

13 Q. SIR, WOULD YOU PLEASE LOOK, ONCE AGAIN, TO
14 THE TWO-PAGE DOCUMENT THAT IS PLAINTIFF'S 6, I BELIEVE,
15 THE ONE ENTITLED, "REPORT OF CALL AT SYRACUSE", THE
16 MEMO.

17 A. YES.

18 MR. MACAULEY: THAT'S 5.

19 MS. EISENSTEIN: 5. I'M SORRY.

20 Q. DO YOU SEE, ON THE SECOND PAGE, THE FIRST
21 COMPLETE -- NO. THE SECOND COMPLETE SENTENCE SAYS, "WE
22 SUGGESTED THAT CNA CONTACT DR. TABERSHAW FOR ADVICE ON
23 THIS WHOLE SITUATION, AND THEY SEEMED QUITE RECEPTIVE"?

24 A. YES.

25 Q. DO YOU HAVE ANY REASON TO BELIEVE THAT YOU

1 DIDN'T ACTUALLY SUGGEST DR. TABERSHAW?

2 MR. BENDER: OBJECTION. IMPROPER INQUIRY. ASSUMES
3 FACTS NOT IN EVIDENCE, AND INSTRUCT THE WITNESS NOT TO
4 ANSWER.

5 BY MS. EISENSTEIN:

6 Q. DID DR. TABERSHAW CONSULT ON -- ASIDE FROM
7 THE BONEY CASE, DO YOU KNOW IF DR. TABERSHAW CONSULTED ON
8 ANY OTHER WORKERS' COMPENSATION CASES FOR VANDERBILT?

9 A. I DON'T KNOW.

10 Q. OKAY. DID YOU MENTION EARLIER DR. KEITH
11 MORGAN?

12 A. YES.

13 Q. I BELIEVE I ASKED YOU EARLIER IF HE HAS
14 EVER BEEN RETAINED BY VANDERBILT TO TESTIFY?

15 A. YOU DID.

16 Q. DO YOU KNOW WHETHER HE WAS RETAINED BY CNA
17 TO TESTIFY IN THIS BONEY CASE?

18 A. I DON'T KNOW.

19 Q. OKAY. WHO IS DR. HANS WEILL?

20 A. HE IS AN M.D. WHO WAS IN THE OCCUPATIONAL
21 MEDICINE FIELD.

22 Q. AND WHEN WAS THE FIRST TIME YOU HEARD OF
23 DR. WEILL?

24 A. I CAN'T REMEMBER.

25 Q. OKAY. DO YOU REMEMBER WHETHER HE TESTIFIED

1 IN THE BONEY CASE?

2 A. I DON'T KNOW.

3 Q. YOU DIDN'T TESTIFY, DID YOU?

4 A. NOT TO MY KNOWLEDGE.

5 Q. AS YOU SIT HERE TODAY, DO YOU HAVE ANY
6 KNOWLEDGE OF WORKERS' COMPENSATION CLAIMS FILED BY TALC
7 MINERS OR MILLERS THAT HAVE ALLEGED EXPOSURE TO ASBESTOS
8 FROM YOUR TALC?

9 A. I AM NOT -- I AM NOT AWARE OF ANY, UNLESS
10 -- UNLESS THE INFORMATION CONTAINED IN THIS PARTICULAR
11 DOCUMENT HERE --

12 Q. YOU ARE REFERRING TO PLAINTIFFS' 5?

13 A. I AM HOLDING UP THIS DOCUMENT (INDICATING),
14 THAT INDICATES THAT THERE WAS A WORKMEN'S COMPENSATION
15 CASE, AND THE DIAGNOSIS WAS DUE TO CANCER, AND THAT'S ALL
16 I KNOW. BRONCHOGENIC CANCER. AND THAT'S ALL THAT I CAN
17 -- AT THIS TIME, THAT'S ALL THAT I CAN -- THE ONLY ANSWER
18 I CAN ANSWER.

19 Q. SIR, DO YOU KNOW WHAT A THIRD PARTY SUIT
20 IS?

21 A. NOT REALLY.

22 Q. WHEN WAS -- AS YOU SIT HERE TODAY, DO YOU
23 HAVE ANY KNOWLEDGE, ASIDE FROM THIS CASE, OF ANY CASES
24 HAVING BEEN FILED AGAINST VANDERBILT, IN WHICH A
25 PLAINTIFF WAS CLAIMING PERSONAL INJURY FROM EXPOSURE OR

1 USE OF YOUR TALC PRODUCTS?

2 A. YES.

3 Q. WHEN WAS THE FIRST TIME YOU BECAME AWARE OF
4 A PERSONAL INJURY CASE FILED AGAINST VANDERBILT?

5 MR. BENDER: WHAT'S THE REST OF THE QUESTION?
6 THAT'S TOO BROAD.

7 BY MS. EISENSTEIN:

8 Q. WHEN WAS THE FIRST TIME YOU BECAME AWARE OF
9 A PERSONAL INJURY CASE FILED AGAINST VANDERBILT,
10 PERTAINING TO INJURIES ALLEGED BY A PLAINTIFF AS BEING
11 CAUSED BY EXPOSURE TO TALC OR USE OF TALC?

12 A. OUR TALC?

13 Q. YES.

14 A. ABOUT SIX OR SEVEN YEARS AGO.

15 Q. DO YOU REMEMBER THE NAME OF THE CASE?

16 A. YES. DIDN'T I GO THROUGH ALL THIS?

17 Q. NO. WE NEVER DISCUSSED THIS.

18 A. IT'S THE POINDEXTER CASE.

19 Q. WAS YOUR DEPOSITION TAKEN IN THAT CASE?

20 A. YES, IT WAS.

21 Q. DID YOU TESTIFY AT TRIAL IN THAT CASE?

22 A. NO.

23 Q. WAS THERE A TRIAL?

24 A. YES.

25 Q. WERE YOU SCHEDULED TO TESTIFY?

1 A. I DON'T BELIEVE SO.

2 Q. YOU DON'T -- YOU WERE NEVER CONTACTED TO
3 TESTIFY?

4 A. NO.

5 Q. WHAT WAS THE NATURE OF THE ALLEGATION IN
6 THE POINDEXTER CASE?

7 A. I DON'T REMEMBER.

8 Q. DO YOU REMEMBER WHAT CITY YOUR DEPOSITION
9 WAS TAKEN IN?

10 A. PHILADELPHIA.

11 Q. DID MR. POINDEXTER ALLEGE CANCER?

12 A. I DON'T REMEMBER.

13 Q. YOU STATED THAT THIS POINDEXTER CASE WAS
14 THE FIRST CASE THAT YOU CAN REMEMBER?

15 A. YES.

16 Q. OKAY. WHAT WAS THE SECOND ONE?

17 A. LET ME SEE NOW. BY "CASE", YOU MEAN A
18 SUIT, DON'T YOU?

19 MR. BENDER: A LAWSUIT.

20 MS. EISENSTEIN: A PERSONAL INJURY LAWSUIT.

21 THE WITNESS: NOT ONE THAT HAS GONE TO TRIAL, BUT
22 ONE THAT'S ON THE BOOKS?

23 MS. EISENSTEIN: I'M SORRY; I DIDN'T HEAR.

24 THE WITNESS: YOU DON'T MEAN ONE THAT'S GONE TO
25 TRIAL?

1 MS. EISENSTEIN: YEAH.

2 THE WITNESS: ONE THAT WENT TO TRIAL?

3 MS. EISENSTEIN: ONE THAT WENT TO TRIAL OR WAS
4 SETTLED OR WAS DISMISSED.

5 THE WITNESS: OKAY. THE NEXT ONE WOULD BE THE
6 LOPEZ CASE.

7 BY MS. EISENSTEIN:

8 Q. AND THAT'S THE ONE FROM TEXAS?

9 A. YES. YOU ALREADY MENTIONED THAT.

10 Q. RIGHT. AND YOU WERE DEPOSED IN THAT CASE;
11 RIGHT?

12 A. YES, I WAS.

13 Q. WHEN WAS THE NEXT ONE, SIR?

14 A. I BELIEVE THE NEXT ONE WOULD BE THE MEDFORD
15 CASE.

16 Q. MEDFORD IS THE NAME OF THE PLAINTIFF?

17 A. YES.

18 Q. AND WHAT WAS THE INJURY ALLEGED IN THE
19 MEDFORD INDICATION?

20 A. I BELIEVE IT WAS ASBESTOSIS.

21 Q. WHEN DID YOU BECOME AWARE OF THE MEDFORD
22 CASE?

23 A. APPROXIMATELY TWO YEARS AGO.

24 Q. AND DO YOU KNOW HOW -- WAS IT MR. MEDFORD?

25 A. YES.

1 Q. -- HOW MR. MEDFORD CLAIMS HE WAS EXPOSED TO
2 YOUR PRODUCT?

3 A. HE CLAIMS HE WAS EXPOSED AS PART OF HIS
4 DUTIES IN A CERAMIC MANUFACTURING WORKPLACE.

5 Q. AND YOUR DEPOSITION WAS TAKEN IN THAT CASE?

6 A. YES.

7 Q. DO YOU REMEMBER THE NAME OF THE ATTORNEY?

8 A. NO. WAIT A MINUTE. WAIT A MINUTE. HOLD
9 ON. IN THE MEDFORD CASE, I WASN'T DEPOSED, TO MY
10 KNOWLEDGE. I DON'T THINK I WAS DEPOSED.

11 Q. HOW DID YOU BECOME AWARE OF THAT CASE?

12 A. THROUGH DENNIS RACE, OUR LAWYER, THE PERSON
13 THAT WAS SITTING OVER THERE (INDICATING).

14 Q. DID HE, AT SOME POINT, INFORM YOU THAT
15 THERE WAS THIS CASE FILED AGAINST VANDERBILT?

16 A. YES.

17 Q. YOU HAD A CONVERSATION WITH HIM ABOUT IT?

18 A. YES.

19 Q. WHAT WAS THE SUBSTANCE?

20 MR. BENDER: I'M SORRY; THAT'S CONFIDENTIAL,
21 PRIVILEGED. YOU KNOW THAT. WHY WOULD YOU ASK THAT
22 QUESTION, COUNSEL, KNOWING THAT IT IS IMPROPER?

23 BY MS. EISENSTEIN:

24 Q. WHAT WAS THE DISPOSITION OF THAT CASE?

25 A. MR. MEDFORD LOST.

1 Q. DID I ASK YOU WHAT -- DO YOU KNOW WHAT
2 STATE THAT CASE WAS BROUGHT IN?

3 A. TEXAS.

4 MR. MACAULEY: MEDFORD OR LOPEZ?

5 THE WITNESS: BOTH OF THEM.

6 BY MS. EISENSTEIN:

7 Q. WERE THEY BROUGHT BY THE SAME ATTORNEY?

8 A. NO.

9 Q. WHAT ABOUT THE NEXT CASE, SIR?

10 A. THAT'S IT.

11 Q. ASIDE FROM THIS ONE?

12 A. YES.

13 Q. ACTUALLY, THIS IS THE FIRST ONE, EVEN
14 BEFORE -- AFTER -- WE GOT THEM OUT OF LINE, REALLY. THIS
15 IS REALLY THE FIRST ONE.

16 Q. BEFORE POINDEXTER?

17 A. YES, I BELIEVE. MAYBE IT WAS NOT; I AM NOT
18 SURE. THEY WERE BOTH ABOUT THE SAME TIME.

19 Q. OKAY.

20 A. WE ARE TALKING CHRONOLOGICALLY.

21 Q. RIGHT. THE MEDFORD CASE WENT TO TRIAL;
22 RIGHT?

23 A. YES.

24 Q. OKAY. DID YOU TESTIFY AT TRIAL?

25 A. NO.

1 Q. HAVE YOU EVER TESTIFIED IN A PERSONAL
2 INJURY LAWSUIT?

3 A. NO.

4 Q. HAVE YOU EVER TESTIFIED IN FRONT OF A
5 GOVERNMENTAL BODY?

6 A. YES.

7 Q. WHEN WAS THE FIRST TIME?

8 A. THE BEST OF MY KNOWLEDGE, THE FIRST TIME
9 WAS IN 1984, IN JULY, AND I TESTIFIED -- I GAVE A -- A
10 STATEMENT IN FRONT OF AN OSHA HEARING CONNECTED WITH THE
11 AMENDMENT TO THE ASBESTOS DANGER, THE OSHA ASBESTOS
12 DANGER.

13 I THINK THAT WOULD QUALIFY AS A GOVERNMENT
14 BODY.

15 Q. DID YOU TESTIFY ON BEHALF OF VANDERBILT?

16 A. YES.

17 Q. AND WHAT WAS THE SUBSTANCE OF THAT
18 TESTIMONY?

19 A. THE SUBSTANCE OF THE TESTIFY THERE WAS THAT
20 TALCS DID NOT CONTAIN ASBESTOS; THAT OUR TALCS --

21 Q. THAT YOUR TALCS DID NOT CONTAIN ASBESTOS;
22 CORRECT?

23 A. THAT'S CORRECT; THE GOUVERNEUR TALCS THAT
24 WE WERE SELLING, AND THAT WE WERE DISCUSSING HERE TODAY.

25 Q. OKAY. DID YOU EVER TESTIFY IN FRONT OF ANY

1 OTHER GOVERNMENTAL BODY?

2 A. I CAN'T REMEMBER ANY OTHER GOVERNMENTAL
3 BODY.

4 Q. OKAY. ANY OTHER REGULATORY AGENCY?

5 A. I CAN'T REMEMBER THAT EITHER.

6 Q. OKAY. ANY OTHER TYPE OF ADMINISTRATIVE
7 AGENCY THAT YOU CAN THINK OF?

8 A. OH, I HAVE -- I GAVE A PRESENTATION IN
9 FRONT OF THE ASSISTANTS SECRETARY FOR LABOR.

10 Q. YOU DID? WHEN WAS THAT, SIR?

11 A. IN 19 -- ABOUT 1976. MR. STENDER.

12 Q. SIR, I AM GOING TO HAND YOU A DOCUMENT
13 WHICH, AT THE TOP, IS ENTITLED, "PRESENTATION BY THE R.T.
14 VANDERBILT COMPANY, INC. TO ASSISTANT SECRETARY OF LABOR,
15 MR. JOHN STENDER, INDUSTRIAL TALC, JUNE 19, 1975,
16 WASHINGTON D.C.", AND ASK YOU IF YOU WOULD REVIEW THAT,
17 PLEASE (INDICATING).

18 MR. BENDER: THAT WOULD BE NO. 7; IS THAT RIGHT?

19 MS. EISENSTEIN: YES, THAT WILL BE PLAINTIFF'S
20 EXHIBIT 7.

21 (WHEREUPON, THE DOCUMENT REFERRED TO
22 WAS MARKED AS PLAINTIFFS' EXHIBIT 7 FOR
23 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
24 ATTACHED HERETO.)

25 BY MS. EISENSTEIN:

1 Q. SIR, HAVE YOU REVIEWED THE DOCUMENT
2 (INDICATING)?

3 A. YES, I HAVE.

4 Q. HAVE YOU EVER SEEN IT BEFORE?

5 A. YES, I HAVE.

6 Q. DID YOU MAKE A PRESENTATION BASED ON THIS
7 DOCUMENT?

8 A. YES, I DID.

9 Q. DID YOU GIVE THIS PRESENTATION, COMPRISED
10 OF THIS --

11 A. YES, I DID.

12 Q. THIS IS, AS FAR AS YOU CAN TELL, A TRUE AND
13 ACCURATE COPY OF WHAT YOU WOULD HAVE SUBMITTED TO THE
14 ASSISTANT SECRETARY OF LABOR?

15 A. YES, I BELIEVE IT IS.

16 Q. OKAY. WHAT WAS THE PURPOSE OF THIS
17 PRESENTATION?

18 A. SOMEHOW OR OTHER, WE HAD BEEN WARNED -- AND
19 I DON'T KNOW BY WHOM -- THAT THE OCCUPATIONAL SAFETY AND
20 HEALTH ADMINISTRATION WAS ABOUT TO RESCIND THEIR OSHA
21 FIELD MEMORANDUM NUMBER, WHATEVER THE NUMBER WAS, THAT
22 HAD ALLOWED US TO CERTIFY THAT OUR TALCS DID NOT CONTAIN
23 ASBESTOS.

24 WE WERE -- WE GOT INFORMATION THAT THEY
25 WERE MAKING THIS DECISION BASED UPON AN ANALYSIS OF OUR

1 TALCS SUBMITTED TO THEM, UNBEKNOWNST TO US, BY THE DESERT
2 MINERALS CORPORATION, WHICH WAS A SUBSIDIARY OF
3 JOHNS-MANVILLE, AND OUR INTENTION OF GOING TO WASHINGTON
4 WAS TO APPEAL TO A MR. STENDER NOT TO CANCEL THAT FIELD
5 MEMORANDUM, WITH ALL ITS CRITERIA ON HOW TO DISTINGUISH
6 BETWEEN ASBESTIFORM AND NONASBESTIFORM.

7 Q. AND THAT WAS THE PURPOSE OF THIS
8 PRESENTATION?

9 A. YES, IT WAS.

10 Q. IF YOU WOULD TURN TO PAGE 2 OF THIS
11 DOCUMENT, PLEASE, DO YOU SEE THE SECOND PARAGRAPH, WHERE
12 IT STARTS OUT: OUR COMPETITORS HAVE SEIZED UPON --

13 A. YES.

14 Q. YOU MENTION SEVERAL COMPETITORS. YOU
15 MENTION PFIZER?

16 A. PFIZER.

17 Q. TO YOUR KNOWLEDGE, PFIZER MAKES A TREMOLITE
18 TALC -- I MEAN PRODUCES A TREMOLITE TALC?

19 A. THEY MAKE A TALC CONTAINING TREMOLITE AND
20 THEY MAKE ONE NOT CONTAINING TREMOLITE, AT THE PRESENT
21 TIME.

22 Q. OKAY. AT THE TIME OF THIS PRESENTATION,
23 WERE THEY MAKING THOSE TWO TYPES OF TALC?

24 A. TO THE BEST OF MY KNOWLEDGE, THEY WERE.

25 Q. OKAY. HOW ABOUT -- WHERE ARE THEY LOCATED?

1 A. THE MINES?

2 Q. YEAH, THEIR MINES.

3 A. THEY HAVE MINES IN MONTANA AND CALIFORNIA.

4 Q. IT SAYS CYPRUS INDUSTRIAL MINERALS?

5 A. YES.

6 Q. THEY MAKE A TALC PRODUCT?

7 A. YES, THEY DO.

8 Q. AND WHAT TYPE OF PRODUCT DO THEY MAKE?

9 A. ONE THAT CONTAINS TALC.

10 Q. IS IT A TREMOLITE TALC PRODUCT?

11 A. NO.

12 Q. AND THEY ARE LOCATED WHERE?

13 A. IN MONTANA.

14 Q. OH. THEY ARE IN MONTANA.

15 AND JOHNS-MANVILLE AT THAT TIME MADE A

16 TALC?

17 A. THEY MADE A TALC; THEY MADE A TREMOLYTIC

18 TALC.

19 Q. AND ENGELHARD MINERALS?

20 A. THEY MAKE A NONTREMOLYTIC TALC, OR DID MAKE

21 ONE.

22 Q. OKAY. AS OF 1975, WERE YOU AWARE OF ANY OF

23 THOSE COMPETITORS THAT WE HAVE JUST MENTIONED LABELING

24 THEIR TALC PRODUCTS WITH ANY TYPE OF WARNING?

25 A. AS OF 1975, I AM NOT AWARE -- I DON'T

1 REMEMBER WHAT -- WHETHER ANY OF THOSE HAD ANY TYPE OF
2 WARNING LABEL ON IT, IN 1975.

3 Q. DID YOUR TALC PRODUCTS HAVE A WARNING LABEL
4 IN 1975?

5 A. NO, THEY DIDN'T.

6 Q. COULD YOU TURN TO PAGE 3, PLEASE? YOU MAKE
7 REFERENCE IN THE SECOND FULL PARAGRAPH TO A COMPETITOR.
8 DO YOU SEE THAT, SIR?

9 A. THE ONE THAT STARTS, "WE EVEN HAVE THE" --

10 Q. RIGHT.

11 A. YES. OKAY.

12 Q. WHO IS THE COMPETITOR YOU ARE REFERRING TO
13 THERE?

14 A. I DON'T KNOW WHO THAT WOULD BE.

15 Q. THE FOLLOWING SEVERAL PARAGRAPHS DEAL WITH
16 JOHNS-MANVILLE; IS THAT CORRECT?

17 A. I -- YES, THEY DO.

18 Q. IT'S --

19 A. THIS IS A COMPETITOR IN THE TALC BUSINESS,
20 BECAUSE IT'S THE DESERT MINERALS DIVISION OF
21 JOHNS-MANVILLE WE ARE TALKING ABOUT HERE, ALTHOUGH IT
22 DOESN'T SHOW HERE.

23 Q. OKAY. IT SAYS, IN THE FOURTH FULL
24 PARAGRAPH, THAT REPRESENTATIVES FROM JOHNS-MANVILLE
25 APPROACHED YOUR COMPANY IN EARLY APRIL TO DISCUSS

1 LABELING OF TALCS OR ASBESTOS WARNING LABELS?

2 A. YES, THEY DID.

3 Q. DID THEY ACTUALLY MEET WITH ANY
4 REPRESENTATIVES FROM VANDERBILT?

5 A. YES, THEY DID.

6 Q. WERE YOU PRESENT AT THAT MEETING?

7 A. YES, I WAS.

8 Q. WHO ELSE WAS PRESENT AT THAT MEETING, SIR?

9 A. DR. THOMPSON AND MR. H.B. VANDERBILT, SR.
10 MR. FIEDERLEIN AND MR. NOLAND.

11 Q. WHO WAS THERE ON BEHALF OF MANVILLE?

12 A. A FELLOW WHOSE NAME -- LAMAR.

13 Q. LAMAR?

14 A. YEAH. L-A-M-A-R, I THINK. RICHARD LAMAR,
15 AND THEIR LAWYER, WHOSE NAME ESCAPES ME.

16 Q. DO YOU KNOW WHAT RICHARD LAMAR'S CAPACITY
17 WAS WITH MANVILLE AT THAT TIME?

18 A. I BELIEVE HE WAS A LABORATORY MAN, BUT I
19 DON'T KNOW WHAT HE DID.

20 Q. SIR, WAS MANVILLE A MEMBER OF THAT HEALTH
21 COMMITTEE THAT WE TALKED ABOUT IN THE VERY BEGINNING
22 TODAY, OF WHICH YOU WERE --

23 A. NATIONAL PAINT AND COATINGS --

24 Q. YES.

25 A. NOT TO MY KNOWLEDGE.

1 Q. COULD YOU TELL ME, PLEASE, THE SUBSTANCE OF
2 THAT MEETING IN APRIL?

3 A. THE SUBSTANCE WAS THAT THEY BELIEVED THAT
4 THEIR TALC CONTAINED ASBESTOS -- THE TREMOLITE IN THEIR
5 TALC WOULD QUALIFY AS ASBESTOS, ACCORDING TO THE OSHA
6 DEFINITION IN THE OSHA ASBESTOS 29 CFR, 1910.1000 --
7 1001; I'M SORRY.

8 MR. MACAULEY: WHAT'S THAT AGAIN, SIR?

9 THE WITNESS: 29 CFR 1910.1001. IT'S THE OFFICIAL
10 OSHA ASBESTOS STANDARD; IT WAS UP UNTIL A FEW MONTHS
11 AGO. THERE'S A NEW NUMBER NOW.

12 THEY SAID THAT THEY -- OPINION, IN THEIR
13 OPINION, THAT DEFINITION THAT OSHA PUT INTO THAT STANDARD
14 WOULD REQUIRE BOTH THEM AND US, THE VANDERBILT COMPANY,
15 TO LABEL THEIR TALCS WITH THE MANDATED OFFICIAL ASBESTOS
16 WARNING LABEL, MANDATED BY THE STANDARD.

17 BY MS. EISENSTEIN:

18 Q. BY OSHA, THE OSHA STANDARD?

19 A. YES.

20 Q. DO YOU KNOW WHAT THE WORDING OF THAT
21 STANDARD WAS AT THAT TIME?

22 A. NOT IN DETAIL.

23 Q. IT MENTIONED THE WORD "ASBESTOS"?

24 A. YES, IT DID.

25 Q. AND WHAT WAS YOUR RESPONSE TO THEIR

1 SUGGESTION?

2 A. OUR RESPONSE WAS THAT -- THAT OUR
3 INTERPRETATION OF THAT SAME STANDARD, OF THAT SAME
4 DEFINITION, WAS THAT WE DIDN'T HAVE TO LABEL OUR TALCS
5 WITH THE ASBESTOS OFFICIAL LABEL, BECAUSE OUR TALCS DID
6 NOT CONTAIN ASBESTOS.

7 Q. AND WHAT DID YOU BASE THAT OPINION UPON,
8 SIR?

9 A. BASED UPON THE MINERALOGICAL FACT THAT OUR
10 TALCS DO NOT CONTAIN ASBESTOS.

11 Q. WHEN YOU SAY, "THE MINERALOGICAL FACT",
12 HAVE YOU DONE STUDIES?

13 A. YES.

14 Q. HOW MANY STUDIES WOULD YOU SAY HAVE BEEN
15 DONE, SIR?

16 A. OH, MAYBE -- OUR TALCS HAVE BEEN ANALYZED
17 EITHER BY OURSELVES OR BY OSHA, OR SOMEONE LIKE THAT,
18 DOZENS OF TIMES, STARTING AT WAY -- FROM THE DUNN REPORT
19 TO THE INITIAL OSHA ANALYSIS IN SALT LAKE CITY.

20 Q. OSHA'S ANALYSIS HAS DIFFERED FROM YOURS; IS
21 THAT CORRECT?

22 A. NO.

23 Q. OSHA HAS ALWAYS HAD THE SAME --

24 A. NOT ALWAYS, BUT THE MOST RECENT OSHA
25 ANALYSIS DOES NOT FIND -- SUPPORT A FINDING OF ASBESTOS

1 IN OUR TALCS.

2 Q. WHEN WAS THAT OSHA FINDING MADE, SIR?

3 A. THE LAST FINDING THAT WE ARE AWARE OF WAS
4 19 -- ROUGHLY 1979. THEY MAY HAVE -- OBVIOUSLY, THEY
5 HAVE HAD MANY FINDINGS SINCE THAT TIME, BUT LACK OF
6 CITATIONS OF ANY OF OUR CUSTOMERS FOR VIOLATION OF THE
7 OSHA ASBESTOS STANDARD CAN ONLY ALLOW US TO CONCLUDE THAT
8 THERE CONTINUED TO BE NO FINDINGS OF ASBESTOS IN OUR
9 TALC.

10 Q. YOU BASE YOUR OPINION THAT THERE IS NO
11 ASBESTOS --

12 A. TO OUR KNOWLEDGE.

13 Q. YOU BELIEVE THAT OSHA IS OF THE SAME
14 OPINION AS YOU, AS TO NO ASBESTOS IN YOUR TALC, FROM THE
15 FACT THAT THERE HAVE BEEN NO OSHA VIOLATIONS TO YOUR
16 CUSTOMERS, THAT YOU ARE AWARE OF?

17 A. ON THE TWO THINGS, AND I JUST GAVE THEM TO
18 YOU.

19 Q. THAT WAS ONE OF THEM?

20 A. ONE OF THEM IS WE HAVE A DOCUMENT THAT SAYS
21 THEY CANNOT SUPPORT A FINDING OF ASBESTOS IN OUR NYTAL
22 TALCS, AFTER ANALYSIS, AND THIS IS AT THE OSHA OFFICIAL
23 LABORATORY IN SALT LAKE CITY.

24 Q. FROM ROUGHLY 1979?

25 A. ROUGHLY 1979. OKAY?

1 THEN THE SECOND PART OF THAT ANSWER, WHICH
2 I GAVE TO YOU, WAS THAT BY DEDUCTION, IF THERE HAD BEEN
3 ASBESTOS IN THERE, CONCERNING THE FINDINGS OF THE OSHA
4 OFFICIAL LABORATORY IN 1979, WE SURELY WOULD HAVE HEARD
5 ABOUT IT.

6 NOW, OSHA DOES NOT ISSUE ANALYTICAL DATA TO
7 EITHER THE PEOPLE THEY -- THEY INSPECT OR THE SUPPLIERS
8 OF THE MATERIAL TO THOSE PEOPLE TO INSPECT, SO THERE
9 COULD BE ONE HUNDRED DIFFERENT ANALYSES WITHIN THE OSHA
10 PEOPLE AND WE DON'T KNOW ABOUT IT, AND WE CAN'T FIND
11 OUT. I DOUBT WHETHER WE COULD EVEN FIND OUT THROUGH --

12 Q. SO WHAT YOU ARE SAYING IS OSHA COULD HAVE
13 MADE A FINDING AND YOU WOULDN'T KNOW ABOUT IT,
14 NECESSARILY?

15 A. THEY COULD MAKE A FINDING AND THEY WOULD
16 HAVE TO -- BY LAW, THEY WOULD HAVE TO -- IF THEY FOUND
17 ASBESTOS IN OUR TALCS, THEY WOULD BE VIOLATING THE LAW IF
18 THEY DID NOT CITE OUR CUSTOMERS FOR VIOLATION OF THE
19 ASBESTOS STANDARD.

20 Q. BUT THEY WOULD NOT NECESSARILY -- BY LAW,
21 THEY ARE NOT REQUIRED TO NOTIFY THE SUPPLIER, THOUGH; IS
22 THAT CORRECT?

23 MR. BENDER: ARGUMENTATIVE.

24 THE WITNESS: BY LAW, THEY ARE NOT REQUIRED TO
25 NOTIFY THE SUPPLIER.

1 MS. EISENSTEIN: OKAY.

2 Q. AND IF --

3 A. UNLESS -- UNLESS THERE'S AN OSHA REVIEW
4 CASE BROUGHT UP AS A RESULT OF THE CONTESTING OF THE
5 CITATION BY THE PERSON WHO THEY ACCUSE OF VIOLATING IT,
6 IN WHICH CASE, THEN THAT INFORMATION COMES OUT DURING THE
7 REVIEW COMMISSION.

8 Q. LIKE -- AND IN WHICH CASE THE SUPPLIER
9 WOULD HAVE INTERVENED IN THE CASE?

10 A. YES.

11 Q. ALL RIGHT.

12 HAVE YOU FINISHED TELLING ME WHAT THE
13 SUBSTANCE WAS OF THE CONVERSATION WITH THE MANVILLE
14 REPRESENTATIVE AND THEIR LAWYER?

15 A. I THINK SO.

16 Q. OKAY. WAS THERE ONLY ONE MEETING WITH A
17 MANVILLE REPRESENTATIVE?

18 A. YES.

19 Q. OKAY. DO YOU KNOW WHEN MANVILLE PUT A
20 WARNING LABEL ON THEIR TALC PRODUCTS?

21 A. SOMETIME IN THAT 1975-TO-1980 RANGE. I
22 DON'T KNOW EXACTLY WHEN IT WAS; BUT THEY DID PUT IT OUT.
23 IT MIGHT HAVE GONE ON --

24 Q. IT'S GOT TO BE BEFORE 1983.

25 A. IT WOULD HAVE -- LET'S SEE. WE GOT --

1 PROBABLY AFTER 1975. I DON'T THINK THEY HAD PUT IT ON
2 WHEN THEY HAD -- AT THE TIME THAT THEY VISITED US, I
3 DON'T BELIEVE THEY HAD THE WARNING LABEL ON, BUT HAVING
4 TALKED WITH US, I THINK WE TURNED RIGHT AROUND AND MADE A
5 DECISION TO PUT THE WARNING LABEL ON, AND WE MADE A
6 DECISION NOT TO PUT IT ON.

7 Q. OKAY. AFTER -- DID THIS MEETING TAKE PLACE
8 AFTER VANDERBILT ACQUIRED THE ASSETS OF INTERNATIONAL
9 TALC COMPANY?

10 A. I DON'T REMEMBER.

11 Q. OKAY. DID VANDERBILT ACQUIRE THE ASSETS OF
12 INTERNATIONAL TALC COMPANY IN 1974?

13 MR. BENDER: EXCUSE ME HERE. YOU ARE ASSUMING
14 FACTS NOT IN EVIDENCE. IF YOU MEANT SOME OF THE ASSETS,
15 THEN I WOULDN'T OBJECT TO -- BUT THEY DIDN'T ACQUIRE ALL
16 OF THE ASSETS, COUNSEL, AND YOU ARE TRYING TO INFER THAT
17 IN YOUR QUESTION.

18 BY MS. EISENSTEIN:

19 Q. SIR, DID, AT SOME POINT IN TIME, VANDERBILT
20 ACQUIRE AT LEAST ONE MINE THAT HAD BEEN OWNED AND
21 OPERATED BY INTERNATIONAL TALC?

22 A. YES.

23 Q. WAS IT ONE OR TWO MINES?

24 A. TWO MINES.

25 Q. TWO MINES? DO YOU KNOW WHAT YEAR THAT

1 WOULD HAVE BEEN?

2 A. 1974.

3 Q. OKAY. SO IF THIS MEETING TOOK PLACE IN
4 1975, WITH MANVILLE, IT WOULD HAVE BEEN AFTER ACQUIRING
5 THAT THEN; RIGHT?

6 A. YES, IF -- IF IT TOOK -- IF THE MEETING
7 WITH MANVILLE TOOK PLACE AFTER 1974.

8 Q. DO YOU HAVE ANY REASON TO DOUBT THAT --
9 THAT YOUR STATEMENT IN HERE, THAT THE MANVILLE
10 REPRESENTATIVES APPROACHED YOU IN EARLY APRIL OF 1975, IS
11 INACCURATE?

12 A. OKAY. WE GOT IT RIGHT IN HERE. I HAVE NO
13 -- THIS CONFIRMS THAT THEY WOULD HAVE COME TO US IN APRIL
14 OF THIS YEAR, AND SINCE IT SAYS 1975, I HAVE NO REASON TO
15 DOUBT THAT. WE CAN ESTABLISH THAT MAINLY BY READING THE
16 MIDDLE PARAGRAPH OF PAGE 3.

17 Q. OKAY. DO YOU KNOW WHEN PFIZER PUT A
18 WARNING LABEL ON -- DO YOU KNOW IF PFIZER PUT A WARNING
19 LABEL ON THEIR TALC?

20 A. WARNING -- PFIZER PUT A WARNING LABEL ON
21 THERE TREMOLYTIC TALC APPROXIMATELY A YEAR AGO.

22 Q. HOW ABOUT CYPRUS INTERNATIONAL MINERALS?

23 A. NO WARNING LABELS AT ALL.

24 Q. AND ENGELHARD MINERALS?

25 A. NO WARNING LABELS.

1 Q. DO YOU KNOW OF ANY COMPETITORS, ASIDE FROM
2 PFIZER AND MANVILLE, THAT PLACED WARNING LABELS ON THEIR
3 TALC PRODUCTS?

4 A. I KNOW OF NONE.

5 Q. OKAY.

6 A. OTHER THAN MYSELF -- OUR -- VANDERBILT.

7 Q. OKAY. WHEN DID VANDERBILT PUT A WARNING
8 LABEL ON THEIR TALC?

9 A. I BELIEVE IT WAS IN JANUARY OF 1978.

10 Q. AND WHAT DID THAT WARNING LABEL SAY?

11 A. IT SAID, "CAUTION. PRODUCT CONTAINS
12 INDUSTRIAL TALC. DO NOT BREATHE DUST. PROLONGED
13 INHALATION MAY CAUSE LUNG INJURY."

14 Q. DID YOU PARTICIPATE IN THE DECISION TO
15 PLACE A WARNING ON YOUR TALC PRODUCT?

16 A. YES.

17 Q. WHO ELSE PARTICIPATED IN THAT DECISION?

18 A. DR. TABERSHAW.

19 Q. ANYONE ELSE AT VANDERBILT?

20 A. YES. THE GENERAL EXECUTIVE STAFF THAT I
21 MENTIONED MANY TIMES IN THE PAST.

22 Q. THE EXECUTIVE STAFF?

23 A. YES.

24 Q. THAT YOU MENTIONED EARLIER?

25 A. YES.

- 1 Q. WOULD THAT INCLUDE MR. THOMPSON?
- 2 A. HE'S NOT OF THE EXECUTIVE STAFF.
- 3 Q. DID HE PARTICIPATE?
- 4 A. HE PARTICIPATED IN THIS -- IN THIS
- 5 DECISION, YES.
- 6 Q. OKAY. WHO PARTICIPATED IN THE ACTUAL
- 7 WORDING OF THE WARNING LABEL?
- 8 A. MYSELF AND THE ATTORNEY, WHO WAS OUR -- IN
- 9 THIS AREA OF ENDEAVOR AT THAT TIME; I HAVE FORGOTTEN WHO.
- 10 Q. THE GENTLEMAN YOU MENTIONED EARLIER?
- 11 A. NO. I THINK AT THAT TIME IT WAS MR. GUY
- 12 DRIVER (INDICATING).
- 13 Q. DID HE STILL WORK FOR VANDERBILT?
- 14 A. NO.
- 15 Q. DO YOU KNOW WHERE HE WORKS?
- 16 A. YES.
- 17 Q. WHERE IS HE?
- 18 A. WHEN I LAST HEARD ABOUT HIM, IT MUST BE SIX
- 19 MONTHS AGO, HE WAS WORKING IN WINSTON-SALEM, NORTH
- 20 CAROLINA.
- 21 Q. HAS VANDERBILT EVER HAD A WARNING LABEL
- 22 THAT HAD THE WORD, "CANCER", ON IT?
- 23 A. NO.
- 24 I AM PRESUMING THAT YOU ARE REFERRING TO
- 25 THIS TALC?

1 Q. TALC PRODUCT.

2 A. TALC PRODUCTS, RIGHT.

3 Q. THANK YOU, SIR.

4 MR. BENDER: I DON'T KNOW WHETHER OR NOT YOU WANTED
5 TO KNOW ABOUT ANY OTHER --

6 THE WITNESS: RIGHT. ME NEITHER!

7 BY MS. EISENSTEIN:

8 Q. HAS VANDERBILT EVER HAD A WARNING LABEL
9 THAT MENTIONED THE WORD, "ASBESTOS" AT ALL?

10 A. YES.

11 Q. AND WHEN WAS THAT, SIR?

12 A. WELL, IN 1974, WHEN WE ACQUIRED THE -- SOME
13 OF THE ASSETS OF THE INTERNATIONAL TALC COMPANY, WE
14 ACQUIRED A MINE, A SEPARATE MINE THAT CONTAINED A FIBROUS
15 FORM OF TALC, AND WE, AT THAT TIME, MISTAKENLY IDENTIFIED
16 THAT AS FIBROUS -- AS ANTHOPHYLLITE,
17 A-N-T-H-O-P-H-Y-L-L-I-T-E, ASBESTOS.

18 AT THAT TIME, DR. THOMPSON IDENTIFIED THAT
19 MISTAKENLY AS -- SOME OF THAT AS ANTHOPHYLLITE ASBESTOS.
20 AT THAT TIME, HE CLAIMED THAT HE COULD HAVE HAD AS MUCH
21 AS ONE PERCENT ANTHOPHYLLITE ASBESTOS IN A PARTICULAR
22 GRADE OF TALC THAT WE MINED IN THAT AREA, WHICH WAS
23 SEPARATE -- HAD SEPARATES NAMES AND MILLED IN A SEPARATE
24 AREA.

25 Q. WHAT WAS THAT CALLED?

1 A. CALLED FIBERTAL, F-I-B-E-R-T-A-L.

2 Q. OKAY. SIR --

3 A. AND WE PUT THE LABEL, THE OFFICIAL ASBESTOS
4 LABEL ON THAT FOR THE SHORT TIME THAT WE HAD THAT
5 PRODUCT, WHICH WE ACQUIRED FROM INTERNATIONAL TALC, WITH
6 USED TO BE CALLED MOLDENE.

7 Q. SIR, WOULD YOU PLEASE TURN TO PAGE 5 OF
8 YOUR PRESENTATION. WAIT. IS THAT RIGHT? PAGE 6,
9 PLEASE.

10 IN THE FIRST -- WELL, IT'S ACTUALLY THE
11 SECOND PARAGRAPH, YOU SAID: "IN THE CASE OF THE MINERAL
12 TALC, WE HAVE BECOME AWARE, SINCE WE PURCHASED THE ASSETS
13 OF FORMER INTERNATIONAL TALC COMPANY" --

14 MR. BENDER: EXCUSE ME. WAIT A MINUTE. I DON'T
15 THINK OURS HAS A PAGE THAT MATCHES UP --

16 THE WITNESS: HERE IT IS; I HAVE GOT IT. YEAH.
17 OKAY.

18 BY MS. EISENSTEIN:

19 Q. DO YOU SEE THAT PARAGRAPH?

20 A. YES, I HAVE GOT THAT.

21 Q. ARE YOU REFERRING -- IS WHAT YOU WERE JUST
22 DESCRIBING TO ME THE SAME AS WHAT YOU ARE REFERRING TO
23 HERE?

24 A. YES.

25 Q. OKAY. WHAT -- WAS THAT MINE NUMBERED?

- 1 A. YES.
- 2 Q. WHAT NUMBER WAS GIVEN TO THAT MINE?
- 3 A. THREE.
- 4 Q. OKAY. IT SAYS HERE, IN THE FOURTH
- 5 PARAGRAPH DOWN, THE ONE IN THE MIDDLE OF THE PAGE, THAT
- 6 YOU HAVE NOTIFIED YOUR CUSTOMERS OF THE NEED TO COMPLY
- 7 WITH THE OSHA ASBESTOS STANDARD WHEN USING THE PRODUCT:
- 8 A. YES.
- 9 Q. HOW WAS THAT NOTIFICATION PROCESS DONE?
- 10 HOW WERE THEY NOTIFIED?
- 11 A. THEY WERE NOTIFIED BY MAIL, AND -- BY A
- 12 COMBINATION OF MAIL AND LABEL AND MATERIAL SAFETY DATA
- 13 SHEET.
- 14 Q. WHEN YOU SAY NOTIFIED BY MATERIAL SAFETY
- 15 DATA SHEET, WHAT WAS IT -- WHAT DID THE DATA SHEET SAY?
- 16 A. IT INDICATED THE -- THE FIBROUS CONTENT IN
- 17 THERE, AS WELL AS THE WARNING LABEL THAT WE PUT ON THE
- 18 BAGS, WHICH IS THE OFFICIAL ASBESTOS WARNING LABEL.
- 19 Q. WHAT DID IT SAY REGARDING THE FIBROUS
- 20 CONTENT?
- 21 A. THE AMOUNT OF FIBROUS TALC WOULD BE, IN ONE
- 22 GRADE, WAS TWENTY TO FORTY PERCENT, OR THIRTY TO FORTY
- 23 PERCENT, SOMETHING LIKE THAT, AND THE OTHER ONE WAS A
- 24 LOWER GRADE, SOMETHING LIKE TEN TO TWENTY PERCENT.
- 25 Q. OKAY. DID YOU CALL A MATERIAL SAFETY DATA

1 SHEET?

2 A. YES.

3 Q. IS THERE SUCH A THING AS A MINERAL SAFETY
4 DATA SHEET?

5 A. YES. IN FACT, WE TOOK A LITTLE BIT OF
6 POETIC LICENSE THERE AND -- IN DROPPING THE WORD,
7 "MATERIAL" AND USING THE WORD, "MINERAL."

8 Q. OKAY. SO YOUR NOTIFICATIONS IN THAT FORM
9 WERE MINERAL SAFETY DATA SHEETS?

10 A. YES. SINCE THERE WAS NO MANDATED OFFICIAL
11 MATERIAL SAFETY DATA SHEET FOR THESE PRODUCTS AT THAT
12 TIME, WE WERE ABLE TO DO SOMETHING LIKE THAT.

13 Q. WHAT IS A MINERAL SAFETY DATA -- MINERAL
14 SAFETY DATA SHEET?

15 A. IT'S MERELY A SINGLE SHEET THAT GIVES A LOT
16 OF INFORMATION TO THE PEOPLE THAT ARE USING A GIVEN
17 PRODUCT.

18 Q. IS THERE A CERTAIN REGULATION THAT REQUIRES
19 YOU TO SUBMIT ONE OF THESE SHEETS TO A CUSTOMER AND GIVE
20 -- IN CERTAIN CIRCUMSTANCES?

21 A. TODAY, THERE IS; THERE WASN'T BACK BEFORE A
22 YEAR AGO.

23 Q. WHY -- WHAT WAS THE PURPOSE OF HAVING A
24 MINERAL SAFETY DATA SHEET?

25 A. TWO PURPOSES: FIRST PURPOSE, MAKES

1 BUSINESS GOOD SENSE TO INFORM YOUR CUSTOMERS OF THE
2 SAFETY AND HAZARDS OF ANY MATERIAL THAT YOU MIGHT BE
3 SELLING.

4 SECONDLY: EVEN IF WE DIDN'T OFFER A
5 MATERIAL SAFETY DATA SHEET, WE WOULD BE ASKED FOR ONE,
6 AND IF WE DID NOT SUPPLY IT, THE CUSTOMER WOULD THREATEN
7 TO GO TO SOME OTHER SUPPLIER OF THAT SAME MATERIAL.

8 SO THERE'S TWO REASONS.

9 Q. WAS IT A COMMON PRACTICE TO SUPPLY A
10 MATERIAL SAFETY DATA SHEET TO A CUSTOMER?

11 A. YES.

12 Q. WAS THERE A SUGGESTION MADE ON THE PART OF
13 ANY REGULATORY AGENCY TO SEND OUT A MATERIAL SAFETY DATA
14 SHEET?

15 A. YES.

16 Q. AND WHAT REGULATORY AGENCY WOULD THAT HAVE
17 BEEN?

18 A. OSHA.

19 Q. WHAT TYPE OF SUGGESTION WAS IT?

20 A. JUST AS YOU SAY: A SUGGESTION.

21 Q. DID THEY HAVE A CRITERIA ESTABLISHED, UNDER
22 CERTAIN CIRCUMSTANCES, WHEN YOU SHOULD SEND OUT A
23 MATERIAL SAFETY DATA SHEET?

24 A. WELL, THEY PUT OUT WHAT IS KNOWN AS AN OSHA
25 TWENTY FORM, WHICH WOULD BE A TYPICAL MATERIAL SAFETY

1 DATA SHEET THAT COULD BE USED IF YOU WANTED TO MAKE ONE
2 UP.

3 I AM NOT SURE, AT THIS TIME, WHETHER THE
4 ORIGINAL ASBESTOS STANDARD THAT WE WOULD -- WE WERE
5 WORKING UNDER, INSOFAR AS THAT LABELING OF THAT
6 PARTICULAR PRODUCT IS CONCERNED, IN THAT SHORT LENGTH OF
7 TIME, I AM NOT SURE WHETHER THERE WAS A MATERIAL SAFETY
8 DATA SHEET MANDATED IN THE ASBESTOS STANDARD, THE 29 CFR
9 1910.100; THERE MAY HAVE BEEN AND THERE MAY NOT OF HAVE
10 BEEN.

11 Q. IF IT HAD BEEN MANDATED, WOULD YOU HAVE
12 BEEN REQUIRED TO SEND OUT A MATERIAL SAFETY DATA SHEET?

13 A. OF COURSE, LIKE THE LABEL WAS MANDATED.

14 Q. RIGHT.

15 A. I DON'T KNOW WHETHER THE MATERIAL SAFETY
16 DATA SHEET WAS MANDATED OR NOT.

17 Q. OKAY.

18 A. I CAN'T REMEMBER.

19 Q. SO YOUR CUSTOMERS RECEIVED A MATERIAL
20 SAFETY DATA SHEET WHICH HAD A WARNING ON IT?

21 A. YES. THE SAME WARNING AS ON THE BAG.

22 Q. SAME WARNING AS ON THE BAG.

23 OKAY. IN THE -- PLEASE GO BACK TO THE
24 DOCUMENT THAT WE WERE DISCUSSING EARLIER. IN THE FOURTH
25 PARAGRAPH, WHERE YOU TALK ABOUT THE OFFICIAL ASBESTOS

1 WARNING LABEL, THAT WOULD HAVE BEEN THE SAME ONE THAT WAS
2 ON THE -- THE SAME ONE THAT WAS ON THE MSDS?

3 A. MSDS.

4 Q. OKAY. SO THAT IS ONE AND THE SAME THING?

5 A. YES.

6 Q. OKAY. YOU HAD SAID THAT YOU NOTIFIED
7 CUSTOMERS OF THE NEED TO COMPLY WITH THE ASBESTOS -- OSHA
8 ASBESTOS STANDARD. YOU SAID THAT WAS DONE BY MAIL?

9 A. YES.

10 Q. BY THE LABEL, BY THE MSDS?

11 A. YES.

12 Q. ANY OTHER METHOD?

13 A. I DON'T -- I AM NOT AWARE OF ANY OTHER
14 METHOD.

15 Q. OKAY. DO YOU SEND OUT LETTERS TO YOUR
16 CUSTOMERS?

17 A. AS FAR AS I -- THERE WERE ONLY A FEW
18 CUSTOMERS, AND AS FAR AS I KNOW, THEY HAD ALL GOTTEN
19 LETTERS.

20 Q. OKAY.

21 A. BUT I CAN'T SAY FOR SURE THAT IT WAS ALL
22 DELIVERED.

23 Q. WHO WAS RESPONSIBLE FOR DRAFTING THE
24 WORDING OF THE LETTER?

25 A. THAT WOULD HAVE BEEN PARTIALLY MINE AND

1 PARTIALLY THE SALES MANAGER FOR THAT PARTICULAR PRODUCT.

2 Q. AND WHAT WAS THE SUBSTANCE OF THAT LETTER?

3 A. I DON'T REMEMBER.

4 Q. OKAY. DID YOU RETAIN -- DO YOU HAVE A COPY
5 OF THAT LETTER AT THIS TIME?

6 A. I DON'T KNOW IF I HAVE ONE OR NOT.

7 Q. IF YOU WANTED TO FIND OUT, WHERE WOULD YOU
8 GO TO KNOW WHETHER YOU HAVE A COPY?

9 A. I WOULD LOOK IN MY FILES UNDER THE HEADING
10 OF FIBERTAL, IF I STILL HAD A FILE ON IT. WE
11 DISCONTINUED THAT MANY YEARS AGO. 1975 OR SO. 1979.

12 Q. HAS THERE EVER BEEN A WARNING LABEL PLACED
13 ON YOUR NYTAL PRODUCTS?

14 A. YES. I TOLD YOU THAT.

15 Q. WOULD THAT BE THE WARNING THAT'S ON THE
16 MATERIAL SAFETY DATA SHEET?

17 A. YES.

18 Q. WOULD IT HAVE CONTAINED AN ASBESTOS
19 WARNING?

20 A. NO.

21 Q. OKAY. AND WHY IS IT THAT IT WOULD NOT HAVE
22 CONTAINED AN ASBESTOS WARNING?

23 A. BECAUSE IT DOESN'T CONTAIN ASBESTOS.

24 Q. OTHER THAN THE MSDS WARNING, HAVE YOUR
25 NYTAL PRODUCTS EVER CONTAINED ANY OTHER TYPE OF WARNING

1 LABEL?

2 A. NO.

3 Q. SIR, IF YOU COULD PLEASE TURN TO THE NEXT
4 PAGE, AND LOOK AT THE FIRST FULL PARAGRAPH, WHICH SAYS:

5 "IN OUR ON-GOING EVALUATION OF THE FINISHED
6 GROUND PRODUCT WE HAVE FOUND FROM TIME TO TIME THE
7 EXISTENCE OF FIBERS THAT ESCAPED OUR EXAMINATION OF
8 THE CRUDE ORE. AN EXTENSIVE RESEARCH PROGRAM IS IN
9 PROGRESS TO ELIMINATE BY PROCESSING TECHNIQUES ANY
10 FIBERS THAT DO ESCAPE OUR ORIGINAL INSPECTION."

11 WHAT -- WELL, ARE YOU REFERRING TO NYTAL IN
12 THAT --

13 A. YES.

14 Q. OKAY. WHEN WAS THE FIRST TIME THAT YOU
15 FOUND THE EXISTENCE OF THESE FIBERS IN THE NYTAL?

16 A. WELL, IT MUST HAVE BEEN SOMETIME BEFORE
17 1975. WE WERE -- AT THAT TIME, WE WERE LOOKING AT THE
18 FIBERS AND TRYING TO IDENTIFY THEM. LATER ON, WE FOUND
19 OUT THESE FIBERS WERE A FIBROUS FORM OF PURE MINERAL
20 TALC, WHICH OCCURRED IN TRACE AMOUNTS IN SOME OF OUR TALC
21 GRADES.

22 Q. IT SAYS HERE THAT AN EXTENSIVE RESEARCH
23 PROGRAM WAS IN PROGRESS. WHAT DID THAT RESEARCH PROGRAM
24 ENTAIL?

25 A. AT THAT TIME, THEY WEREN'T -- BEFORE THEY

1 KNEW THAT THESE WERE FIBERS OF TALC RATHER THAN FIBERS OF
2 SOMETHING ELSE, BEFORE THEY HAD IDENTIFIED THESE THINGS,
3 THEY WERE -- THEY THOUGHT THEY MIGHT BE ABLE TO REMOVE
4 THEM IN THE GRINDING TECHNIQUE BY AIR CLASSIFICATION.

5 THEY FLOATED UP HIGHER THAN -- THEY FLOATED
6 HIGHER OR EASIER THAN THE REST OF THE TALCS, AND YOU
7 COULD CLASSIFY THEM OUT, AND THEY WORKED ON THAT
8 TECHNIQUE FOR A WHILE, BUT I DON'T KNOW WHETHER --
9 WHATEVER HAPPENED TO THAT.

10 Q. WAS THERE ORIGINALLY SOME CONCERN THAT IT
11 WAS TREMOLITE FIBERS THAT WERE FOUND?

12 A. BEFORE THEY KNEW THE IDENTIFICATION OF
13 THEM, THEY WERE CONCERNED THAT THERE MIGHT BE SOME
14 TREMOLITE OR -- AND/OR ANTHOPHYLLITE FIBERS.

15 Q. BY "THEY", DO YOU MEAN VANDERBILT?

16 A. YES.

17 Q. AM I CORRECT THEN THAT THIS PARTICULAR
18 PROCESS OF FLOATING FIBERS, FLOATING THE FIBERS SO THAT
19 YOU COULD ELIMINATE THEM DID NOT PROVE TO BE A SUCCESSFUL
20 TECHNIQUE?

21 A. I DON'T KNOW WHETHER IT WAS SUCCESSFUL OR
22 NOT. AS FAR AS I KNOW, IT IS NOT USED FOR THAT
23 PARTICULAR PURPOSE. IF THERE ARE FIBERS IN THE TALC,
24 THEY ARE LEFT IN. IF THEY ARE IN -- ANY IN THERE TO
25 BEGIN WITH.

1 Q. AND SO YOU CANNOT SEPARATE THEM OUT THAT
2 WAY; IS THAT WHAT YOU ARE SAYING?

3 A. I DON'T KNOW WHETHER YOU CAN SEPARATE THEM
4 THAT WAY OR NOT.

5 Q. OKAY. WAS THIS PROCESS ABANDONED, THIS
6 RESEARCH PROCESS, AT SOME POINT?

7 A. I BELIEVE SO, WHEN WE FOUND OUT THESE TALC
8 -- THESE FIBERS WERE MADE OUT OF THE PURE MINERAL TALC,
9 WE DIDN'T MAKE ANY MORE EFFORT TO REMOVE THEM.

10 Q. WHO WAS RESPONSIBLE AT VANDERBILT FOR THIS
11 RESEARCH PROGRAM?

12 A. THAT WOULD BE PROBABLY MR. ERDMAN.

13 Q. OKAY. DID YOU PARTICIPATE IN THIS RESEARCH
14 PROGRAM?

15 A. NO.

16 Q. OKAY. WERE THERE ANY WRITTEN REPORTS OR
17 MEMOS DRAFTED BY ANYONE AT VANDERBILT REGARDING THIS
18 RESEARCH PROGRAM?

19 A. I AM NOT AWARE OF ANY.

20 Q. IF YOU WANTED TO FIND OUT IF THERE WERE ANY
21 DRAFTED, AND IF THEY STILL EXISTED, WHERE WOULD YOU GO TO
22 FIND OUT?

23 A. I WOULD GO TO MR. ERDMAN.

24 Q. AT THE TIME THAT THESE FIBERS WERE FOUND IN
25 THE NYTAL, DID VANDERBILT -- WAS VANDERBILT EXEMPT FROM

1 THE OSHA ASBESTOS STANDARD?

2 A. WELL, THESE FIBERS ARE NOT ASBESTOS; OKAY?

3 Q. I UNDERSTAND THAT. RIGHT.

4 A. AND NEITHER DID WE HAVE ANY OTHER ASBESTOS
5 -- ANY FORM OF ASBESTOS.

6 Q. RIGHT.

7 A. SO WE ARE NOT EXEMPT; WE JUST -- OUR
8 PRODUCTS DID NOT -- WOULD NOT COME UNDER THE ASBESTOS
9 STANDARD, BECAUSE THEY DIDN'T HAVE ASBESTOS IN THEM.
10 THERE WAS NO SUCH THING AS AN EXEMPTION.

11 Q. WASN'T THERE AN EXEMPTION GRANTED TO
12 VANDERBILT AT ONE TIME?

13 A. NO, NOT AN EXEMPTION.

14 Q. WAS THERE AN EXCLUSION TO A STANDARD?

15 A. NO; BUT YOU ARE PROBABLY REFERRING TO THE
16 FIELD INFORMATION MEMORANDUM THAT MR. STENDER -- IT WAS
17 THE SUBJECT OF THIS THING HERE (INDICATING).

18 Q. THE PRESENTATION THAT YOU PLAYED?

19 A. YEAH. IN 1974, MR. STENDER AND HIS PEOPLE
20 ISSUED A FIELD INFORMATION MEMORANDUM. THE MEMORANDUM
21 STIPULATED ABOUT FIVE DIFFERENT CRITERIA THAT WERE TO BE
22 USED BY OSHA, THE OSHA INSPECTION, OSHA REGULATORY GROUP,
23 TO DETERMINE WHETHER PARTICLES OF TREMOLITE OR
24 ANTHOPHYLLITE WAS ASBESTOS OR NOT.

25 THAT'S WHAT YOU ARE TALKING ABOUT.

1 Q. AND THE EXEMPTION WAS TO --

2 A. THAT'S NOT AN EXEMPTION; THAT'S MERELY AN
3 INTERPRETATION.

4 Q. OKAY.

5 A. NOW, SHOULD AN INTERPRETATION -- SHOULD THE
6 ASBESTOS STANDARD BE APPLIED TO THESE PARTICLES, OR
7 SHOULD THEY NOT, AND IF THEY ARE APPLIED, HERE ARE THE
8 CRITERIA THAT YOU MUST USE BEFORE YOU MAKE YOUR
9 APPLICATION. THAT IS NOT AN EXEMPTION; THAT'S MORE LIKE
10 A CLARIFICATION OF JUST EXACTLY WHAT THEY WANT TO
11 REGULATE.

12 WHAT IS THE HAZARDOUS MATERIAL AND HOW DO
13 YOU KNOW IT'S THERE, AND THAT WILL BE REGULATED, AND THE
14 OSHA FIELD MEMORANDUM CLARIFIED THAT.

15 Q. AND IN WHAT WAY DID IT CLARIFY IT?

16 A. BECAUSE IT ADDED FIVE CRITERIA THAT REALLY
17 SHOULD HAVE BEEN ADDED TO THE OFFICIAL DEFINITION OF
18 ASBESTOS WHEN THEY PUT IT OUT IN 1972.

19 Q. DID, AT SOMETIME, OSHA RESCIND THAT?

20 A. YES.

21 Q. DURING WHAT PERIOD OF TIME WAS THAT FIELD
22 MEMORANDUM IN EFFECT?

23 A. APPROXIMATELY THREE YEARS AGO.

24 Q. WHAT THREE-YEAR PERIOD WOULD THAT HAVE
25 BEEN, SIR?

1 A. APPROXIMATELY 1972 UNTIL APPROXIMATELY
2 1977.

3 MR. BENDER: THAT'S FIVE YEARS.

4 THE WITNESS: OH. I'M SORRY. 1974 TO 1977;
5 GETTING AHEAD OF IT. THREE YEARS, APPROXIMATELY THREE
6 YEARS.

7 BY MS. EISENSTEIN:

8 Q. AND IT WAS RESCINDED IN 1977?

9 A. YES.

10 Q. SO THAT THE CRITERIA IN DETERMINING WHETHER
11 OR NOT SOMETHING WAS ASBESTOS WAS CHANGED BACK TO WHAT IT
12 WAS PRIOR TO THE FIELD MEMORANDUM?

13 A. BACK TO WHERE IT WAS PRIOR TO THE FIELD
14 MEMORANDUM, WHICH IS BACK TO NOTHING.

15 Q. WHICH CLASSIFIES -- WHICH WOULD RESULT IN A
16 CLASSIFICATION OF ASBESTOS IN YOUR TALC?

17 A. NO. YOU SEE -- LET ME EXPLAIN. THERE WAS
18 NO -- NO INSTRUCTION, YOU MIGHT SAY, BY MEANS OF THEIR
19 DEFINITION, THAT WOULD ALLOW THE ENFORCING GROUP WITHIN
20 THE AGENCY TO DETERMINE WHETHER OR NOT A MINERAL PRODUCT
21 WAS ASBESTIFORM OR NOT. SO THE FIELD MEMORANDUM GAVE
22 THEM THAT ABILITY.

23 THEN THAT ABILITY WAS TAKEN AWAY, AND IT
24 LEFT THEM BACK WHERE THEY WERE. NOW, UNFORTUNATELY, THE
25 OSHA LABORATORY IN SALT LAKE CITY, THAT WAS IN CHARGE OF

1 LOOKING FOR THESE PARTICLES THAT WERE ASBESTOS, BECAME
2 MORE SOPHISTICATED, WE WILL SAY, AND THERE WAS NO DOUBT
3 IN THEIR MIND WHAT WAS ASBESTIFORM AND WHAT WASN'T. SO
4 THE RESCINDING OF THE FIELD MEMORANDUM REALLY DIDN'T HAVE
5 AN EFFECT ON THE ANALYSIS THAT WAS BEING DONE IN SALT
6 LAKE CITY.

7 Q. OKAY.

8 A. IT DIDN'T REALLY -- IT MEANT REALLY
9 NOTHING.

10 Q. I'M SORRY; WHAT WAS THAT?

11 A. IT MEANT REALLY NOTHING.

12 Q. OKAY.

13 A. OUR POSITION DIDN'T CHANGE.

14 Q. BY "POSITION", WHAT DO YOU MEAN, SIR?

15 A. VIS-A-VIS, THE ENFORCEMENT BRANCH OF OSHA.
16 WE WERE STILL NOT BEING ANALYZED AS HAVING ASBESTOS BY
17 THE PEOPLE WHO DO THE ANALYSIS FOR OSHA, WHICH RESULTS
18 EITHER IN A CITATION OR NOT A CITATION.

19 Q. OKAY.

20 MS. EISENSTEIN: LET'S TAKE A BREAK, AND THEN I
21 JUST WANT TO SHOW YOU ONE QUICK THING, AND THEN I AM
22 FINISHED FOR TODAY.

23 (A BREAK WAS TAKEN AT THIS TIME.)

24 MS. EISENSTEIN: LET'S GO BACK ON THE RECORD.

25 Q. SIR, I AM GOING TO HAND YOU A PIECE OF

1 PAPER WHICH, ON THE TOP, SAYS R.T. VANDERBILT COMPANY,
2 AND ON THE TOP RIGHT-HAND SIDE, IT SAYS "MINERAL SAFETY
3 DATA SHEET", AND ASK YOU TO LOOK AT IT, PLEASE
4 (INDICATING).

5 (WHEREUPON, THE DOCUMENT REFERRED TO
6 WAS MARKED AS PLAINTIFFS' EXHIBIT 8 FOR
7 IDENTIFICATION BY THE NOTARY PUBLIC AND IS
8 ATTACHED HERETO.)

9 THE WITNESS: I LOOKED AT IT.

10 BY MS. EISENSTEIN:

11 Q. HAVE YOU EVER SEEN THAT TYPE OF DOCUMENT
12 BEFORE?

13 A. NO.

14 Q. IS THAT THE MINERAL SAFETY DATA SHEET THAT
15 YOU WERE REFERRING TO A FEW MOMENTS AGO?

16 A. YES.

17 Q. OKAY. DO YOU SEE, AT THE VERY BOTTOM,
18 WHERE IT SAYS, "SPECIAL PRECAUTIONS"?

19 A. YES.

20 Q. DOES YOUR COPY SAY, "DO NOT BREATHE DUST.
21 PROLONGED INHALATION OF EXCESSIVE DUST MAY CAUSE LUNG
22 INJURY"?

23 A. YES.

24 Q. IS THAT THE WARNING THAT WE WERE DISCUSSING
25 EARLIER?

1 A. THIS IS NOT ACCURATE. WHEN WE PUT THIS OUT
2 -- YOU HAPPENED TO GET A SHEET THAT HAD SOMETHING EXTRA
3 ADDED, THAT'S BEEN TAKEN OUT, AND IT SHOULDN'T HAVE BEEN
4 THERE IN THE FIRST PLACE. IN ORDER TO BE EXACTLY LIKE
5 THE LABEL, WE SAY, "PROLONGED INHALATION MAY CAUSE LUNG
6 INJURY." WE DIDN'T PUT THE "OF EXCESSIVE DUST."

7 Q. "MAY CAUSE LUNG INJURY"?

8 A. YEAH, "PROLONGED INHALATION MAY CAUSE LUNG
9 INJURY."

10 NOW, WE MAY GO BACK. ACTUALLY, WE SHOULD
11 HAVE EXCESSIVE DUST IN THERE, AND WE WERE DEBATING
12 WHETHER TO PUT THAT ON THE LABEL OR NOT. THIS ALSO --

13 Q. WHY WERE YOU DEBATING IT, SIR?

14 A. BECAUSE IT TAKES EXCESSIVE DUST, UNDER LONG
15 CONDITIONS OF TIME, IN ORDER TO CAUSE ANY KIND OF LUNG
16 INJURY AT ALL.

17 Q. AND WHAT DO YOU BASE THAT ON?

18 A. THE RESULTS OF THE TABERSHAW STUDY.

19 Q. OKAY.

20 MS. EISENSTEIN: THANK YOU VERY MUCH, SIR.

21 THAT'S ALL THE QUESTIONS I HAVE FOR THE
22 TIME BEING.

23 WE HAVE HAD A DISCUSSION OFF THE RECORD
24 REGARDING WHEN TO SCHEDULE THE SECOND SESSION OF THIS
25 DEPOSITION. THIS DEPOSITION HAS NOT BEEN CONCLUDED TODAY

1 BUT WILL BE CONTINUED. IT'S BEEN AGREED AMONG COUNSEL
2 AND THE WITNESS THAT BY NEXT WEEK, WE WILL SUPPLY EACH
3 OTHER WITH DATES ON WHICH TO CONTINUE THIS DEPOSITION.

4 MR. RACE: ARE WE TALKING ABOUT WITHIN THE NEXT
5 MONTH OR SO, OR --

6 MR. BENDER: DECEMBER OR JANUARY, I WOULD SAY.

7 MS. EISENSTEIN: I HAVEN'T MADE THAT ASSUMPTION.

8 MR. BENDER: OH, I'M SORRY. EARLIER THAN THAT
9 THEN?

10 MS. EISENSTEIN: WELL, I WOULD LIKE TO SET IT UP
11 BEFORE THE END OF THE YEAR.

12 MR. RACE: THAT'S FINE; THAT'S MY ONLY CONCERN. I
13 DIDN'T WANT IT TO DRAG INTO --

14 MS. EISENSTEIN: NO; I WOULD LIKE TO DO IT AS SOON
15 AS POSSIBLE, SO --

16 THE WITNESS: WHY DON'T YOU SHOOT FOR THE LAST WEEK
17 IN NOVEMBER AND THE FIRST WEEK IN DECEMBER? THOSE ARE
18 GOOD TIMES. THAT'S BEFORE THE CHRISTMAS STUFF STARTS
19 GOING, AND HAVE JUST GOTTEN OVER THANKSGIVING. FOR MOST
20 PEOPLE, THAT'S KIND OF A DEAD AREA, INSOFAR AS PERSONAL
21 TRAVEL IS CONCERNED.

22 AFTER THAT, YOU KNOW, EVERYBODY TAKES OFF.
23 THEY GO SKIING AND THEY GO --

24 (DISCUSSION ENSUED OFF THE RECORD.)

25 MS. EISENSTEIN: WE HAVE AGREED THAT WE WILL SUPPLY

1 EACH OTHER WITH DATES TO FINISH THIS DEPOSITION BY THE
2 ENDS OF NEXT WEEK THEN.

3 MR. BENDER: THE DATES TO BE SUPPLIED BY THE END OF
4 NEXT WEEK.

5 MS. EISENSTEIN: RIGHT; BY EVERYONE, INCLUDING US.

6 I WOULD LIKE TO PROPOSE THE FOLLOWING
7 STIPULATION: THAT THE COURT REPORTER BE RELIEVED OF HER
8 DUTIES UNDER THE CODE, AND THAT -- LET'S GO OFF THE
9 RECORD FOR A MINUTE.

10 (DISCUSSION ENSUED OFF THE RECORD.)

11 MS. EISENSTEIN: LET'S GO BACK ON THE RECORD.

12 THAT THE TRANSCRIPT WILL BE SENT TO MR.
13 BENDER'S OFFICES, AND HE WILL, AT THAT TIME, IMMEDIATELY
14 FORWARD THEM TO THE WITNESS TO REVIEW AND MAKE
15 CORRECTIONS, AND THE WITNESS WILL, WITHIN TWO WEEKS OF
16 RECEIVING IT, READ IT AND NOTIFY HIS ATTORNEY OF ANY
17 CHANGES, AND THAT PLAINTIFF WILL BE NOTIFIED --

18 MR. BENDER: -- THIRTY DAYS FROM THE DATE THAT WE
19 RECEIVE THE ORIGINAL TRANSCRIPT.

20 MS. EISENSTEIN: OKAY. FINE.

21 MR. BENDER: WITHIN THIRTY DAYS; HOPEFULLY SOONER.

22 MS. EISENSTEIN: OKAY. ALL RIGHT?

23 THE WITNESS: OKAY.

24 MR. BENDER: OFF THE RECORD.

25 (DISCUSSION ENSUED OFF THE RECORD.)

1 MS. EISENSTEIN: WAIT A SECOND.

2 IF THE TRANSCRIPT HAS NOT BEEN SIGNED AND
3 CHANGES MADE, AN UNSIGNED COPY CAN BE USED FOR ALL
4 PURPOSES AT THE TIME OF TRIAL.

5 MR. BENDER: TWO ATTORNEYS AREN'T HERE, BUT I WILL
6 SO STIPULATE.

7 MS. EISENSTEIN: WELL, ALL RIGHT. OKAY. THANK YOU
8 VERY MUCH.

9

10

11

(DATE)

12

13

ALLEN MORGAN HARVEY

14

15

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PELLETIER & JONES

1 STATE OF CALIFORNIA)
2) SS.
3 COUNTY OF LOS ANGELES)

4 I, _____, A NOTARY PUBLIC IN
5 AND FOR THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA,
6 DO HEREBY CERTIFY:

7 THAT ON THE _____ DAY OF _____, 1986, BEFORE
8 ME PERSONALLY APPEARED ALLEN MORGAN HARVEY, THE WITNESS
9 WHOSE DEPOSITION APPEARS HEREINBEFORE;

10 THAT THE SAID WITNESS WAS BY ME DULY ADVISED OF THE
11 RIGHT TO MAKE SUCH CHANGES AND CORRECTIONS IN THE WITHIN
12 TRANSCRIPT AS MIGHT BE NECESSARY IN ORDER TO RENDER THE
13 SAME TRUE AND CORRECT;

14 THAT THE SAID WITNESS STATED TO ME THAT THE SAID
15 DEPOSITION HAD BEEN READ TO OR BY HIM, AND HE, HAVING
16 MADE SUCH CHANGES AND CORRECTIONS AS HE DESIRE, THEREUPON
17 SUBSCRIBED AND SWORE TO SAID DEPOSITION IN MY PRESENCE.

18 IN WITNESS WHEREOF, I HAVE HEREUNTO SUBSCRIBED MY
19 NAME AND AFFIXED MY SEAL OF OFFICE THIS _____ DAY OF
20 _____, 1986.

21
22 _____
23 NOTARY PUBLIC IN AND FOR THE COUNTY
24 OF LOS ANGELES, STATE OF CALIFORNIA.

25

PELLETIER & JONES

1 STATE OF CALIFORNIA)
) SS.
2 COUNTY OF LOS ANGELES)

3

4 I, PATRICIA W. YARNELL, CSR NO. 2019, REGISTERED
5 PROFESSIONAL REPORTER, A NOTARY PUBLIC IN AND FOR THE
6 COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DO HEREBY
7 CERTIFY:

8 THAT, PRIOR TO BEING EXAMINED, THE WITNESS NAMED IN
9 THE FOREGOING DEPOSITION, TO WIT, ALLAN MORGAN HARVEY,
10 WAS BY ME DULY SWORN TO TESTIFY THE TRUTH, THE WHOLE
11 TRUTH AND NOTHING BUT THE TRUTH;

12 THAT SAID DEPOSITION WAS TAKEN DOWN BY ME IN
13 SHORTHAND AT THE TIME AND PLACE THEREIN NAMED AND
14 THEREAFTER REDUCED TO COMPUTERIZED TRANSCRIPTION UNDER MY
15 DIRECTION.

16 I FURTHER CERTIFY THAT I AM NOT INTERESTED IN THE
17 EVENT OF THE ACTION.

18 WITNESS MY HAND AND SEAL THIS 15TH DAY OF OCTOBER,
19 1986.

20

21

22

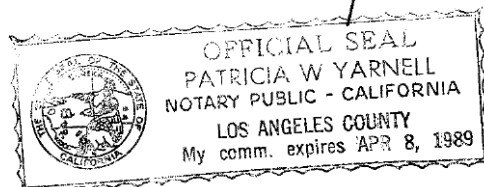
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25

Patricia W. Yarnell

NOTARY PUBLIC IN AND FOR THE COUNTY
OF LOS ANGELES, STATE OF CALIFORNIA.



DRAFT

REVIEW OF OCCUPATIONAL MORBIDITY AND MORTALITY

AT THE

GOUVERNEUR TALC CO.

PLTF/EXHIBIT
 EXHIBIT NO. 10-a-816
 DATE 1/25/19
 WITNESS (16/12)
 N.P. PATRICIA W. YARNELL, CSR 2019

In 1975 the National Institute of Occupational Safety and Health conducted occupational morbidity and mortality studies in the Gouverneur Talc mine. An objective of the studies was to determine if exposure to talc was associated with an elevated incidence of respiratory cancer and respiratory diseases such as pleural thickening, opacities and abnormal pulmonary function. An industrial hygiene study was also made of the mine and mill.

The results of these studies were published in whole or in part. 1/2/
 In these publications NIOSH raises four issues.

- A. The airborne dust in the mine and mill contained asbestos fibers in concentrations in excess of the OSHA standard.
- B. As a result of exposure to the dust some workers at GTC developed pleural thickening, pleural calcification and pneumoconiosis. Pulmonary function of talc workers was significantly decreased when compared to potash workers.
- C. Workers exposed to talc have an increased risk for cancer of the respiratory system, for this study the risk was 275% greater than normal (3 expected, 10 observed).

1-A

- D. A recommendation of the Technical Report was that Gouverneur Talc Co. and users of the talc should comply with the OSHA requirements for exposure to asbestos.

The R.T. Vanderbilt Co., the owner of the Gouverneur Talc Co., requested Tabershaw Occupational Medicine Associates to evaluate the morbidity and mortality findings of the NIOSH studies. This report is one phase of an in-depth evaluation being conducted by R.T. Vanderbilt Co. The three phases include:

1. A complete mineral analysis and an identification of the fiber content and characteristics of the talc produced by Gouverneur. This study is being conducted by R.T. Vanderbilt in cooperation with consulting mineralogist.
2. An evaluation of the morbidity finding reported by NIOSH. This project was undertaken by TOMA, and two rounds of clinical and radiological examinations of Gouverneur employees have been completed; one in 1978 and another in 1979. The results of these studies were submitted to the R.T. Vanderbilt Co. in April 1980. These studies essentially confirm the results of the NIOSH morbidity study. A significant proportion of the Gouverneur workers have radiological evidence of pleural thickening and pleural calcification, a smaller proportion have opacities in one or both lung fields but only one case was considered to have progressed to ILO/UC grade 1. It is believed, however, that pleural thickening is caused by the mineral talc and is independent of its asbestos content.

3. An evaluation of the mortality study.

TOMA submitted to R.T. Vanderbilt Co. a preliminary evaluation of the NIOSH mortality study on December 5, 1978. This report stated that the NIOSH study implicated talc as the eti^eological agent but there was insufficient evidence that exposure to talc at the Gouverneur mill and mine resulted in an excess number of lung cancer deaths. After a restudy of the data, it appears that ^{previous} employment in underground metal mines may have greater significance than talc exposure in accounting for the excessive rate of lung cancer among workers employed by the Gouverneur Talc Company between 1948 and 1960. This report will present evidence for this conclusion.

Cases Reviewed

The work histories of 14 lung cancer cases and one case of mesothelioma employed for some time period between 1948 and 12/31/1960 and who died between 1948 and 12/31/1975 were reviewed. This is an additional 4 cases to the 11 cases (10 lung cancer and 1 mesothelioma) included in the NIOSH study, as NIOSH used a cutoff date of 12/31/75 as compared to a TOMA cutoff date of 12/31/76.

Table 1 is a summary of available information for each of the 15 cases. (See Attachment)

Table 2 summarizes the work period at GTC.

TABLE 2

Work Period at GTC for 15 Lung Cancer Cases*

Work Period	No. of Cases	% of Cases
17 days	2	13.3
1-3 months	3	20.0
3-6 months	1	6.6
6-12 months	1	6.6
1-2 years	0	0.0
2-3 years	2	13.3
3-4 years	1	6.6
5-6 years	1	6.6
6-10 years	0	0.0
11-12 years	1	6.6
15-17 years	<u>3</u>	<u>20.0</u>
Total	15	100.0

* For the purpose of this analysis, the case of mesothelioma is considered lung cancer.

It is inconceivable that an exposure period at GTC of three months of less could result in an occupational ^{lung} cancer. If an exposure of less than three months could result in an occupational cancer then a much higher incidence rate than that determined by NIOSH would be expected, even if it were assumed that these cases occurred among highly susceptible [^] individuals. If these 5 cases were eliminated as caused by exposure at GTC then the number of cases would be 10. Their elimination as GTC-caused does not imply that they are not occupational. If it were assumed that an employment period of 1 year had no significance in the etiology of lung cancer then an additional 2 cases could be removed as GTC-caused, bringing the total number in question to eight cases. We are not justified at this time in removing the two cases with 3-12 months exposure as no information is available on the dose-response relationship. However, the eight remaining cases would still be greater than the 3.3 expected cases (a rate of 242% of expected).

Prior Exposure to Carcinogenic Agents

In any historical prospective epidemiologic study it is necessary to determine ^{all} past exposures [^] among the cohort [^] to agents which may have caused the disease or disability being studied. In this case ^{cause of the lung} at least three categories of ^{expos} previous employment [^] could be considered suspect; [^] talc, there is evidence that certain mineral forms of talc may be capable of inducing lung cancer; construction, it is known that ^{asbestos} asbestos exposures can occur among construction workers; non-ferrous metal mining, it is known that radon [^] is frequently encountered in underground non-ferrous metal mines and is sometimes found in ferrous mines.

^{up-look}
Using information supplied by GTC and (contained in
printout) the distribution of cases by prior employment

Table 3.

TABLE 3

Distribution of Lung Cancer Cases by Previous
(TOMA Printout)

<u>Past Exposure</u>	<u>No of Persons Employed By GTC in the Category</u>	<u>^{NO.} % of Persons in this Category No of Lung Cancer Cases</u>
Zinc	65	5
Talc	103	3
Construction/Trades	11	2
Iron/other mines/stone	42	3
No prior dust	114	1
Unknown	45	1
Other	36	0
Total	416	15

* 1 person had been employed by Benson & T & L
in J & L for 4 months, and 1 worked for a contractor
constructed shafts for underground mining.

In 1978 Dr. Lamm conducted a more thorough review of
records and arrived at the distribution shown

TABLE 4

Distribution of Lung Cancer cases by Previous Employment

(Dr. Lamm's Analysis)

<u>Past Exposure</u>	<u>No of Persons Employed By GTC in the Category</u>	<u>No of Lung Cancer</u>	<u>% of Persons In this Category</u>
Zinc	65	5	7.7
Talc	103	4	3.9
Construction	11	1*	9.1
Iron/other mining/stone	42	4	9.5
No prior dust exposure	114	0	0.0
Unknown	45	0	0.0
Other	36	1	2.7

* This is adding case #15 with 4 months in an iron mine. This case was not in Lamm's analysis.

Although this analysis shows construction to be high risk in terms of lung cancer we are unable to attach statistical significance to the number because of the small number of persons in the group. However, the one case of mesothelima had worked for 11 years in the construction industry, in addition to prior employment in a talc industry.

What about iron mine

The distribution of lung cancer caused by exposure class is shown in Table 5.

1-6

TABLE 5

Distribution of Lung Cancer Cases by Exposure Class

Exposure	No. of Cases	% of Cases
Underground Metal Mines	9	60.0
Talc	4	26.66
Construction	1	6.66
Other	<u>1</u>	<u>6.66</u>
Total	15	100.00

Based on this analyss there are reasons to suspect that prior employment in an underground metal mine may be the most significant factor in the etiology of these lung cancer cases.

Occupations at GTC

If exposure to talc dust at GTC is suspected as a cause of the excess lung cancer deaths, there should be at least an approximate equal distribution of cases between underground and surface workers. In fact the greater number of cases should occur in surface workers since prior to 1960 dust exposures among mill workers was greater than underground workers. However, an analysis of these occupations at GTC showed that 11 of 15 deaths occurred in underground personnel and 4 occurred in surface workers. Among the surface workers only 1 case occurred in a mill operator while 3 occurred in mill maintenance

personnel. Mill operators have a greater exposure to talc dust than mill maintenance personnel. In fact packers have the greatest potential for dust exposure but none of the lung cancer deaths occurred among this occupational category.

Although figures are not immediately available on the distribution of surface and underground workers in the cohort, surface employment is approximately 2½ times the underground employment. If GTC talc dust were the causative agent, the greater number of cases should have occurred in surface workers with mill production workers predominating. Table 6 shows the distribution of lung cancer cases by mine and surface workers.

TABLE 6

Distribution of Lung Cancer Cases by Underground and Surface Workers

<u>Approximate Size Of Cohort</u>	<u>Mine on Surface</u>	<u>No of Cases</u>	<u>% Total</u>
112	Mine	11	73.3
	Miners	(8)	(53.3)
	Mine Support	(3)	(20.0)
304	Mill	4	26.7
	Mill Operator	(1)	(6.6)
	Mill Maint..	(3)	(20.0)

% of mine personnel with death from lung cancer - 9.8

% of surface workers with deaths from lung cancer - 1.3

11

Lung cancer occurred approximately 7.5 times more frequently among underground workers than surface workers.

Morbidity Among Surface and Underground Workers

If GTC talc is suspected as the etiologic agent for the excess lung cancers then it would be expected that a greater proportion of morbidity would be in the group with the greatest exposure to dust. Thus, it would be expected that surface workers, especially mill operators, would have a greater incidence of respiratory complication due to dust inhalation than underground workers. These complications would include pleural thickening and opacities.

In the TOMA morbidity studies of 1978 and 1979 it was determined that these conditions occur about twice as frequently in surface workers as compared to underground workers. This relationship is shown in Table 7.

TABLE 7
Relationship of Dust Related Pulmonary Diseases
Between Surface and Underground Workers

	Employee	With ^{1/} Pleural		With ^{2/} Opacities		Total	
		No	%	No	%	No	%
Surface	112	18	16.0	14	13.0	31	28.6
Underground	40	4	10	3	7.5	7	17.5
Ratio of Surface/Underground	2.8	4.5	1.6	4.6	1.7	4.6	1.6

^{1/} Some have both pleural thickening and opacities.

^{2/} Opacities without pleural thickening

Although we have no information which would prove that thickening and/or opacities are precursors of lung cancer, to assume that workers with these conditions would have a incidence of lung cancer if both were caused by the same this premise is correct then a greater incidence of lung cancer is expected in surface workers than in underground workers. the opposite appears to be true.

Unfortunately chest x-rays are not available for most in the study cohort. The following is a summary of the available information on 7 of the 15 cases:

Case #5

17 years of GTC employment
1952 Employment x-ray - Nothing of significance
1966 x-ray - Diffuse fibrosis and emphysema
Died 1973.

Case #7

16 years of GTC employment
1952 Employment X-ray - "Calcified densities"
1967 "No evidences of fibrosis"
Died 1968

Case #8

11 years of GTC employment
1953 Employment x-ray "peritruncial changes due to
1960 "Fine nodulation & stranding"
Died 1975

Case #9

5 years of GTC employment

1954 Employment x-ray "Markings in both lungs"

1958 "No change"

Died 1960

Case #12

4 years of GTC employment

1950 Employment X-ray - "Nothing of clinical significance"

1953 "Nothing of clinical significance"

Died 1961

Case #13

17 years of GTC employment

1956 Employment x-ray "Markings in both lungs"

1972 "Fibro-emphysematous changes"

Died 1973

Case #14

5 months employment at GTC

No x-rays are available for this person but it was reported that his lung cancer developed 5 months after his employment and was removed surgically. He died 10 years after surgery.

At least four of the cases had x-ray changes of the chest at the time of employment. ^{while} Two cases developed emphysematous changes after employment ~~which indicates that the lung cancers may have been caused by smoking.~~ *This is no smoking, p. General Stuckey*

Latency Period

NIOSH placed considerable emphasis on the latency period which was determined by the difference between the year of employment at GTC and year of death. This presumes that the cause of lung cancer was due to talc exposure at GTC. The true latency period is the difference in years between the initial exposure to the causative agent and the time of diagnosis which can be significantly different from time of death. In the 11 NIOSH cases the latency period stated ranged from 6-25 years. Eight of the 11 (73%) had stated latency periods in the range of 18-25 years. This closely approximates the latency period for asbestos, the average latency is assumed to be about 20 years. The stated latency for the one case of mesothelioma was 16 years, this is considered to be a short latency period for mesothelioma due to asbestos. The latency period for mesothelioma is considered to be longer, ^{about 30 years} than that for lung cancer due to asbestos which indicates that his exposure to asbestos may have been prior to his employment at GTC.

The latency period for the 15 TOMA cases have the following distribution based on the NIOSH method of determining latency.

<5 months	-	2	-	13.3
6-10 years	-	1	-	6.6
10-14 years	-	1	-	6.6
16-20 years	-	3	-	20
21-25 years	-	7	-	46.6
> 25 years	-	1	-	6.6
		<u>15</u>		<u>100.0%</u>

1-102

Confidence cannot be placed in the latency periods shown since many individuals have long work periods after leaving GTC employment and thus had the potential for carcinogenic exposure after their separation from GTC. The potential for work experience after leaving GTC is shown in the following distribution:

None or less than 1 year	-	4	-	26.66%
7 - 10 years	-	2	-	13.33%
10 - 15 years	-	3	-	20.00%
15 - 20 years	-	1	-	6.66%
20 - 25 years	-	<u>5</u>	-	<u>33.33%</u>
	-	15		100.00%

If lung cancer cases were to be calculated on the basis of previous employment the latent periods would be longer than those shown. Since complete occupational histories are not available it is not possible to calculate latency based on previous employment. However, it is known that the latency period for lung cancer due to exposure to low level radon concentrations can be in excess of 20 years.

Dose-Response

There is insufficient data to develop a dose-response relationship in the cohort. The dose would be calculated as the average exposure to airborne dust times the number of years of exposure. In any group with an exposure to an agent which causes a biological action, the group with the highest dose should have greatest abnormal effect. In the

1-2

NIOSH study there were 399 persons in the cohort with a total of 8995 person - years at risk of dying: 50% of these workers were employed one year or less while less than 25% were employed for 10 years or more.

There were 75 person-years of GTC employment and 274 person-years at risk of dying among those with lung cancer. This group had 3% of the total person-years at risk of dying while the group with no lung cancer deaths accounted for 97% of person-years. Since the group with lung cancer represented a low exposure group in terms of airborne dust, while mill production workers were the high risk group, it would appear that these lung cancers were not dose related.

Conclusion

1. Based on this analysis it is unlikely that the excess lung cancer deaths occurring among GTC employees employed between 1948 and 1960 and dying before 12/31/75 is due to talc exposure at GTC.
2. There is a high probability that these excess deaths could be attributed to prior GTC employment. The most likely cause appears to be employment in underground metal mining. However, other talc mines and mills cannot be completely eliminated.
3. It does not appear that NIOSH was justified in making the statement that talc produced and sold by GTC should be handled in accordance with the OSHA regulations for asbestos.

4. Because the talc produced by GTC does cause pulmonary abnormalities, dust exposure for GTC employees and users of the product should be reduced to the lowest feasible level but not in excess of 2 mg/m^3 .
5. Since smoking histories are not available the influence of smoking on lung cancer cases cannot be ~~included~~ ^{evaluated}.

Requirements for Further Studies

1. Additional data should be obtained from GTC employment and medical records to validate the data on which this report was based.
2. The mortality study should be updated to include all workers employed between 1948 and 1978 and those persons with deaths occurring prior to 1/1/80. Precise occupational and clinical histories should be developed for all lung cancer cases.

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A MORBIDITY STUDY OF EMPLOYEES

AT

GOUVERNEUR TALC COMPANY

Submitted by

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Studies Conducted - December, 1978 and 1979
 Report Submitted - April 25, 1980

27A

TABLE OF CONTENTS

I.	INTRODUCTION AND BACKGROUND	1
II.	EXPOSURE TO AIRBORNE TALC DUST	2
III.	OCCUPATIONAL PULMONARY DISEASES DUE TO TALC EXPOSURE	3
IV.	THE MORBIDITY STUDY	5
V.	CHARACTERISTICS OF THE PLANT POPULATION	7
VI.	RESULTS OF CHEST X-RAY EXAMINATIONS	15
VII.	PULMONARY FUNCTION (1979)	25
VIII.	SPUTUM CYTOLOGY	34
IX.	RESPIRATORY QUESTIONNAIRE	37
X.	OTHER MEDICAL FINDINGS	40
XI.	SUMMARY OF OBSERVATIONS	41
XII.	RECOMMENDATIONS	43
XIII.	CONCLUSIONS	45
	REFERENCES	46

TABLES

TABLE 1	- Age Distribution of Employees by Frequency of Percent	8
TABLE 2	- Duration of Employees' Work Span at Gouverneur By Frequency and Percent	9
TABLE 3	- Classification of Job Titles by Dust Exposure Based on 1978 Data	10
TABLE 4	- Distribution of Examined Employees by Prior Dust Exposure	14
TABLE 5	- Summary of Findings Relating to Opacities	17
TABLE 6	- Summary of Findings Relating to Pleural Thickening	19
TABLE 7	- Summary of Cases with Opacities but Without Other Pulmonary Complications	23
TABLE 8	- Summary of Cases with Pleural Thickening and Other Pulmonary Complications	24
TABLE 9	- Results of FVC and %FEV ₁ for all Cases 1979 Results	26
TABLE 10	- FVC By Smoking History 1979 Results	27
TABLE 11	- Relationship Between Restrictive Impairment (FVC) and Cases with Opacities, Pleural Thickening and Cases without Opacities and Pleural Thickening	29
TABLE 12	- FVC of Cases without Opacities or Pleural Thickening by Smoking History	30
TABLE 13	- Effect of Classifying 3 Cases of Pleural Thickening with Opacities in the Opacity Group	31
TABLE 14	- Relationship of Normal and Abnormal FVC to Years of Employment at GTC	32
TABLE 15	- Workers Whose Significant Exposure to Talc was at GTC	33
TABLE 16	- Results of Sputum Cytology Tests by Smoking History	35
TABLE 17	- Results of Sputum Cytology Tests	36
TABLE 18	- Distribution of Persons By Smoking History	38
TABLE 19	- Distribution of 141 Persons by Symptoms	38
TABLE 20	- Distribution of 141 Persons by Number of Symptoms	38
TABLE 21	- Distribution of Symptoms by Smoking History All Workers	39
TABLE 22	- Results of Clinical Diagnoses	40

212

A MORBIDITY STUDY OF EMPLOYEES OF GOUVERNEUR TALC COMPANY

April 1980

I. INTRODUCTION AND BACKGROUND

A NIOSH mortality study of employees of the Gouverneur No. 1 Mine and Mill of the R. T. Vanderbilt Company conducted in 1975 and reported in 1977 indicated excessive mortality among workers in the mine and mill due to bronchogenic cancer. This study implicated dust exposure in the Gouverneur Mine and Mill as the etiologic agent in the production of bronchogenic cancer and pneumoconiosis.

A morbidity study of mine and mill workers was conducted by NIOSH concurrently with the mortality study. The following summary was included in the published report:¹

"Chest roentgenograms, pulmonary function assessment by spirometry, respiratory symptoms, smoking history, and occupational history by questionnaire were obtained from 121 male talc miners and millers exposed to talc containing tremolite and anthophyllite asbestiform fibers. Ninety-three of the employees had worked in talc only at the plant under study. Symptoms were only slightly more prevalent in talc workers when compared to potash miners. Mean pulmonary function (forced expiratory volume in one sec. forced vital capacity, and maximal expiratory flow at 50 and 75 percent of vital capacity) of talc workers was significantly decreased in comparison to that of potash miners. The prevalence of pleural calcification and pneumoconiosis in talc workers with 15 or more years of employment was higher than in potash miners. The prevalence of pleural thickening was 31 percent in those who worked more than 15 years and was significantly increased as compared to that in potash miners. Workers with pleural thickening had decreased pulmonary function in comparison to those who did not. Decreased one-second forced expiratory volume and forced vital capacity were associated with exposure to respirable particulates and asbestiform fibers."

2-E

Tabershaw Occupational Medicine Associates P.A. (TOMA) was employed by the R. T. Vanderbilt Company in 1977 to evaluate the NIOSH mortality and morbidity findings. The first step in this evaluation was a review of the NIOSH mortality findings. This evaluation, submitted to R. T. Vanderbilt Company on December 5, 1978, confirmed the NIOSH conclusion that there was an excess number of respiratory (malignant and non-malignant) deaths among workers employed at the Gouverneur Talc Company (GTC) prior to 1960, but showed that mortality from lung cancer and non-malignant respiratory diseases was among workers only with known occupational exposure to mineral dust exposure prior to employment at GTC.

Vanderbilt has conducted medical surveillance of the Gouverneur workers for many years. In December, 1978 and December, 1979, TOMA performed cross-sectional morbidity studies of GTC workers in response to the earlier NIOSH work. This document summarizes TOMA's findings, and compares them to the NIOSH findings.

II. EXPOSURE TO AIRBORNE TALC DUST ²

Operations at GTC began in 1948 with the development and opening of Mine #1 (underground). Ore from this mine was ground, classified and bagged in Mill #1. Ore from Mine #1 contained 50-60% tremolite with practically zero fiber content of any kind, either tremolite, anthophyllite, or talc. Between 1948 and 1974, Mine #1 was the only source of ore for Mill #1.

In mid-1974, Gouverneur acquired an open pit mine (Mine #2) and a fibrous talc mine (Mine #3) from the International Talc Company, and at the same time, Mill #3 became operational. From 1975 to 1977, Mill #3 utilized ores from Mine #3 to produce FIBERTAL which contained 20-30% of the fibrous form of the mineral talc. The finished product contained anthophyllite asbestos to the extent of 2% to 3% of the finished product. This product was labelled with the official OSHA asbestos label. Production of FIBERTAL ceased early in 1978 and Mine #3 was allowed to flood. Since the beginning of 1978, Mill #3 has not been used to produce talc products.

From 1974 to the present, Mill #1 has processed ore from both Mine #1 and #2. Ore from Mine #2 may be processed separately or mixed with ore from

Mine #1, depending upon the product desired. As a result, dust exposures in Mill #1 since 1974 have been about 50% from Mine #1 and 50% from Mine #2. Ore from Mine #1 contains from zero to trace quantities of mineral fibers of any type. Ore from Mine #2 contains from 0% to 5% fibrous materials with a mill average of about 2.0%. The amount of asbestiform anthophyllite in the finished product ranges from 0 to 0.2%. As a result, the amount of total fiber (talc and anthophyllite) that Mill #1 workers have been exposed to, since 1974, ranges from 0 to 1% on a weight basis. Tremolite from Mines #1 and #2 is not asbestiform. Chrysotile has not been found in any of GTC ores or products by Company sponsored analyses.

Ore produced by Mines #1 and #2 and processed in Mill #1 contain from 1% to 5% crystalline quartz, but the mill product contains from 1% to 2% quartz.

III. OCCUPATIONAL PULMONARY DISEASES DUE TO TALC EXPOSURE

Long term exposure to talc dust may cause certain pulmonary diseases which have been described in the medical literature.³ Unfortunately, most of the reported studies did not include an adequate mineral description of the talc even though the morphology of the mineral may have a significant bearing on potential pathology. Mineral characteristics of talc deposits can vary widely depending on a number of geologic factors. In general, ore deposits range in composition from 100% of the mineral talc to mixtures of various minerals containing as little as 10% of the mineral talc.

Without respect to the mineral characteristics of talc, exposure to talc dust has been reported to produce pneumoconiosis; pleural thickening, evidenced by obliteration of the costophrenic sinuses and the cardiac border and the appearance of pleural plaques which may calcify; and pulmonary function abnormalities related to a restrictive impairment.³

Pneumoconiosis, evidenced by opacities on the x-ray film, can be caused by a wide variety of mineral dusts. The extent and severity of the disease

is influenced by the amount of crystalline quartz in the airborne dust. Talc dust, free of quartz, should produce a mild pneumoconiosis with minimal disability while a talc dust containing an appreciable amount of quartz may produce a more severe pneumoconiosis resembling silicosis, often accompanied with severe respiratory disability.

Pleural thickening occurs in the pleura or outer lining of the lungs. Pleural thickening may also be caused by infections such as tuberculosis, as well as hemothorax, emphysema, and broken or fractured ribs. When caused by infections, pleural thickening is usually limited to one lung but when caused by dust exposure it is usually evident in both lungs or bilaterally. Pleural thickening is associated with some silicates but not with exposure to quartz.

Abnormal pulmonary function is a reported finding among persons exposed to talc. The abnormality is a restrictive impairment (decreased vital capacity and total lung capacity) and a reduction in the diffusion capacity, reflecting impaired gas exchange. Ventilatory impairment among talc workers has not correlated well with clinical and x-ray findings. Among workers exposed to quartz, pulmonary function tests are usually normal until the onset of dyspnea (shortness of breath). The abnormality associated with quartz has features of obstructive and restrictive disease.

Since most studies of talc workers reported in the literature do not consider the mineral characteristics, it is not possible to state that the reported abnormalities such as pleural thickening and restrictive pulmonary disease are due to an exposure to the mineral talc or to other minerals associated with talc.

The appearance of any of these symptoms, when due to occupational factors, is a dose related function. Therefore, symptoms such as pneumoconiosis, pleural thickening and restrictive pulmonary disease are related to concentration of the agent and duration of exposure. Because of the delay between initial exposure to the agent and appearance of symptoms, presence of disease in an exposed population does not necessarily reflect a hazardous exposure at the time of diagnosis.

The NIOSH study reported that 38 to 40% of the airborne fibers were anthophyllite asbestos and 12 to 19% were tremolite asbestos. No quantitative data of the amount of fibers in the bulk talc material were given. These determinations were made by electron microscopy. More than 90% of all airborne fibers were shorter than 5 micrometers. These findings differ significantly from the Company's characterization of the mineral being produced at the time of the NIOSH study. The Company maintains that NIOSH misidentified the fibrous form of the pure form of the mineral talc in the samples analyzed. NIOSH also reported that all free silica exposures were less than 50 micrograms per cubic meter of air.

The present MSHA standard for respirable non-asbestiform talc is 20 mppcf or 3 mg/m^3 when calculated as a TWA. Previous environmental studies by NIOSH and MSHA reported most dust concentrations in the mine and mill were below 3 mg/m^3 when calculated as a TWA. A more complete discussion of these findings was given in the TOMA report of December 5, 1978.

IV. THE MORBIDITY STUDY

In December, 1978, a TOMA team consisting of physicians, occupational health nurses, and support technicians conducted medical examinations of 142 employees of the Gouverneur mine and mill. Of this number, 21 had administrative duties while 121 spent all or a significant proportion of their time in the mine or mill. Some of the 21 persons with administrative duties had been previously employed in occupations with a dust exposure. Although participation of the employees in the medical examination program was voluntary, 95.9% (or 142 of 148) of the eligible employees were examined.

¹¹⁹In 1979, the examinations were repeated. The eligible population was then 156 persons, of whom 152 (96.7%) had at least one test performed. Among these, there were 127 persons who participated in both studies. The second examination served to confirm or adjust diagnoses of 1978 and to alert the investigators to possible progression of disease in individual cases. The medical examination included:

1. Chest Roentgenograms - Chest x-rays were taken by the local hospital two to three months prior to the medical examinations. These x-rays plus prior x-rays located in the workers' radiologic file were interpreted by Professor W. Keith Morgan of the University of Western Ontario, using the ILO/UC rating system. At the time of the medical examination, the TOMA examining physician, reviewed the latest and previous x-rays with the worker. Pleural and pulmonary abnormalities were identified on the x-ray and evaluated in terms of occupational relationships.
2. A general medical history - This form was used to identify past or present diseases experienced by the worker, smoking history, use of alcoholic beverages, and identification of previous serious injuries.
3. A special respiratory medical history - This form was used to identify the extent and type of respiratory symptoms present in the workforce, either at present or in the past. The form did not attempt to differentiate between occupational and non-occupational conditions. However, it contained an occupational history with special reference to dust exposure and a smoking history as well as a family morbidity and mortality history. The form was a modification of a respiratory questionnaire developed by the American Thoracic Society.
4. Sputum Cytology - Sputum samples obtained from the deeper recesses of the respiratory system were examined to determine the presence of cells indicative of a carcinogenic process. The sputum sample was obtained during the physical examination by a standard procedure. Cytology was performed by the Center for Laboratory Medicine, Trevese, Pennsylvania. In the 1979, study sputum cytology was conducted only on workers whose results in 1978 were class II and workers who had not had a sputum cytology test.
5. Pulmonary Function Tests - Spirometry tests were performed on all examined workers. This test determines the degree of pulmonary disability, if present, by measuring forced vital capacity (FVC) and percent forced expiratory volume in one second (%FEV₁). FVC

is evaluated by comparing the actual expired total volume during maximum respiration to the normal volume predicted on the basis of age, height, sex and race of the worker. %FEV₁ is the ratio of actual volume expired in one second to actual total volume expired in determining FVC. The following classifications for FVC and %FEV₁ were used:

	FVC		%FEV ₁
Normal	80% or greater	Normal	70% or greater
Mild	66% - 79%	Mild	61% - 69%
Moderate	51% - 65%	Moderate	46% - 60%
Severe	50% or less	Severe	45% or less

V. CHARACTERISTICS OF THE PLANT POPULATION

Workers at GTC, for the most part, are natives of the surrounding area. The majority of employed workers appear to be of West European extraction with predominately Anglo-Saxon names. Because Up-State New York has a large mining industry, many GTC workers have had previous dust exposures to pneumoconiotic dusts. Of the 148 employees examined in 1978, 9.4% were less than 25 years of age, 67.6% were between 25 and 50, and 23% were over 50. Of the 152 employees examined in 1979, 8.5% were less than 25 years, 68.2% were between 25 and 50, and 23.2% were over 50. Table 1 shows the age distribution of employees and Table 2 shows the work span at GTC. About 50% of all employees had worked at GTC more than 5 years.

Table 3 is a list of all occupations with an assigned level of dust exposure together with the number of employees for each occupational category.

Review of work histories prior to employment at Gouverneur revealed that many employees had prior exposure to talc and other mineral dust. These exposures were classified into four categories based on prior work histories. This information is reflected in Table 4.

2x

TABLE 1

Age Distribution of Employees by Frequency of Percent

<u>Age Range</u>	<u>Number of Workers</u>		<u>% of Workers</u>		<u>Cumulative %</u>	
	1978	1979	1978	1979	1979	1979
15-19	3	1	2.0	0.7	2.0	0.7
20-24	11	12	7.4	7.9	9.4	8.6
25-29	22	25	14.9	16.6	24.3	25.2
30-34	14	15	9.5	9.9	33.8	35.1
35-39	20	20	13.5	13.2	47.3	48.3
40-44	20	16	13.5	10.6	60.8	58.9
45-49	24	27	16.2	17.9	77.0	76.8
50-54	20	15	13.5	9.3	90.5	86.1
55-59	13	17	8.8	11.3	99.7	97.4
60-64	<u>1</u>	<u>4</u>	<u>0.7</u>	<u>2.6</u>	<u>100.0</u>	<u>100.0</u>
TOTAL	148*	152**	100.0	100.0		

* All employees

** Examined Employees

2-1

TABLE 2

Duration of Employees' Work Span at Gouverneur
By Frequency and Percent

<u>Work Span - Years</u>	<u>No. of Workers</u>		<u>% of Workers</u>	
	1978	1979	1978	1979
1	8	11	5.4	7.2
1-5	66	69	44.5	45.4
6-10	22	22	14.9	14.5
11-15	18	18	12.1	11.8
16-20	10	7	6.8	4.6
21-25	14	15	9.5	9.9
26-30	10	7	6.8	4.6
30-35	<u>0</u>	<u>3</u>	<u>0.0</u>	<u>1.9</u>
TOTAL	148*	152**	100.0	100.0

* All employees

** Examined employees

2-12

TABLE 3

CLASSIFICATION OF JOB TITLES BY DUST EXPOSURE
Based on 1978 Data

NO DUST EXPOSURE

<u>Job Title</u>	<u>Number Examined</u>
Accountant	1
General Clerk	1
Invent. Control (C)	1
Invent. Control (S)	1
Payroll Clerk	1
Personnel and Safety Director	1
Property Control Specialist	1
Purchasing Agent	1
Receptionist	1
Secretary	1
Shipping Clerk	2
Stock Clerk	1
Vice President and General Manager	1
Watchman	<u>2</u>
TOTAL	16

2-10

TABLE 3 (continued)

MINIMUM DUST LEVELS

<u>Job Title</u>	<u>Number Examined</u>
Electrician	5
Engineer	1
Hoistman	1
Instrument Repairman	1
Machinist	1
Maintenance Mechanic	6
Mill Electrical Foreman	1
Mine Superintendent	1
Quality Control	6
Repairman	1
Sheet Metal Worker	1
Stock Clerk - Underground	1
Welder	<u>1</u>
TOTAL	28

270

TABLE 3 (continued)

SOME DUST EXPOSURE

<u>Job Title</u>	<u>Number Examined</u>
Engineering Technician	2
Forklift Operator	1
Janitor	1
Mill Maintenance Foreman	1
Mill Shift Foreman	5
Mill Superintendent	1
Millwright	7
Mine Engineer	1
Mine Stock Clerk	1
Mobile Equipment Mechanic	3
Mobile Utility Operator	2
Truck Driver	1
Truck Driver - Open Pit	3
Truck Driver Production	2
TOTAL	31

2-8

TABLE 3 (continued)

SIGNIFICANT DUST EXPOSURE

<u>Job Title</u>	<u>Number Examined</u>
Car Liner	1
Cageman	1
Crusher Operators	7
Drillers	7
Driller Operator	1
Fuller Kinyon Operator	1
Gen. Mine Foreman	1
Hardinge Operators	6
Laborers	10
Milling Operator	2
Mine Maintenance Foreman	1
Mine Shift Foreman	1
Mine Shift Boss	2
Miners	2
Oiler	1
Packhouse Foreman	2
Packhouse Utility Operator	1
Packers	9
Packer Serviceman	2
Tractor Operator	1
Trammers	10
Wheeler Operators	<u>3</u>
TOTAL	72

20

TABLE 4

Distribution of Examined Employees by Prior Dust Exposure

Type of Prior Dust	<u>No. of Employees</u>		<u>% of Employees</u>	
	1978	1979	1978	1979
Prior Talc Mine (PT)	39	38	27.5	25
Prior Non-Talc Mine (NTM)	41	45	28.9	29.6
Non-Mine Dust (NMD)	25	30	17.6	19.7
No Known Dust (NKD)	<u>37</u>	<u>39</u>	<u>26.0</u>	<u>25.7</u>
TOTAL	142	152	100.0	100.0

2-R

VI. RESULTS OF CHEST X-RAY EXAMINATIONS

In the two rounds of examinations, a total of 157 employees were examined. Of these, 127 were examined in both years. Among the 151 employees with chest x-rays, 36 (24%) had x-ray findings related to dust exposure: opacities in the lung fields, and/or pleural thickening, pleural calcification, and the presence of so-called pleural plaques. The severest findings, cancer of the lungs or pleura, were not observed.

1. Pulmonary opacities:

The ILO/UC coding scheme⁴ recognizes 9 groups based on individual size and shape; the profusion is graded in 12 degrees of severity for each of 6 different zones.

This works well for individual patient management but may make data reduction complicated. In the case of GTC, the task is easy due to the fact that only one of the 9 groups is observed. This has a designation of "t" which is "medium defined irregular opacities." Furthermore, only three profusion groups are represented; namely, 0/1, 1/0, and 1/1.

0/1 is considered a normal finding, however, the reader concedes that the conclusion might be disputed by other readers.

1/0 and 1/1 signify that the reader considers small, irregular opacities to be present but are few in number.

"1/0" is a finding that might be disputed. "1/1" is considered to be an unequivocal finding.

There are many reasons for this hedging in borderline cases; the films are, after all, only shadows of the truth, and at times the shadows leave room for differences of opinion.

Eighteen (18)^{*} films showed irregular opacities in the lung fields on one or both occasions. This may be the beginning of pneumoconiosis but only one of the 18 was graded "t, 1/1"; six were graded "t, 1/0" and must be considered borderline; ten were graded "t, 0/1" and may be considered within normal limits. Results of the two studies (1978 and 1979) are shown in Table 5. Ten of the 18 cases had been previously employed in a talc mine or mill or in a non-talc mine or mill.

* One employee (case #77) without a chest x-ray in 1979 was reported as t, 0/1 in 1976 & 1978. This case is not included in Table 5.

TABLE 5

Summary of Findings Relating to Opacities

<u>Condition</u>	<u>No. of Employees</u>		<u>% of Employees</u>	
	1978	1979	1978	1979
No observed opacities	136	134	95.8	88.2
Small irregular opacities 0/1	3	11	2.1	7.2
Small regular opacities 1/0	3	6	2.1	3.9
Small regular opacities 1/1	<u>0</u>	<u>1</u>	<u>0.0</u>	<u>0.7</u>
	142	152	100.0	100.0

4.2

2. Pleural Thickening and Pleural Calcifications

This is a slowly progressing or a stationary condition of the outer lining of the lungs. Once established, it is unlikely to improve, and apparent improvements must be assumed to reflect variations in the film quality and reading bias. By the same token, apparent progression between two consecutive readings may or may not be real. It is a matter that can be settled only by continuing surveillance.

A quantitative evaluation requires a film of high technical quality and film readers with skill and experience.

The observations are coded by site (costophrenic angle, walls and diaphragm, right and left lining), by width (3 degrees) and by extent. Thickening and calcification, although related, are coded separately. In addition, a specific finding, pleural plaques, is noted separately. Therefore, there could be many possible permutations.

Twenty-two of the workers had pleural thickening on one or more sites and of varying degree. Of the twenty-two, there were five with pleural thickening more than 10 mm at the widest and extending over more than half the visible area. The others were smaller in width and extent. One pleural plaque was recorded in 1978 but not confirmed in 1979.

In seven cases, pleural calcification was also reported. An analysis of the pleural thickening cases is shown in the following table. Two cases of pleural thickening reported in 1978 were not x-rayed in 1979 and are not included in this analysis. Case No. 32 was first diagnosed as pleural thickening in 1972. Case No. 77 was reported as pleural thickening in 1970.

TABLE 6

Summary of Findings Relating to Pleural Thickening.

Pleural Thickening:	Costophrenic Angle			Diaphragm & Wall				
	L	R	B	Sub Total	L	R	B	Sub Total
Total	4	1	4	9	7	1	11	19

L = Left Side
 R = Right Side
 B Bilateral

2-7

These findings of pleural thickening do not differ significantly from the NIOSH findings: 1.1% of the 95 persons examined, with talc exposure only at GTC, had irregular opacities (greater than Grade 1) and 1.1% had rounded opacities; a total of two cases. The 18 cases found in the TOMA study represented a larger group consisting of employees with exposure in other talc and non-talc mines and those with exposure only at GTC. Additionally, the exposure time had been increased by 3 to 4 years. In the 1978 and 1979 studies, only one case (#139) of Grade 1 was found. Prior to 1979, this case had been reported as within normal limits. No cases of rounded opacities were observed. No significance is attached to the 11 cases of 0/1 opacities. The 6 cases of 1/0 should be followed biennially as these may be early pneumoconioses. The case of 1/1 can be classified as pneumoconiosis without disability, but progression may occur. Four cases of opacities also had pleural thickening.

The following is the NIOSH discussion of opacities relating to GTC workers. "Parenchymal fibrotic changes are categorized as small or large opacities (there were no large opacities in this study). Small, rounded opacities are typically associated with coalworker's pneumoconiosis and silicosis, and small irregular opacities are associated with exposure to asbestos. However, small, rounded opacities with or without irregular opacities may also result from exposure to asbestos (32). Small, irregular opacities also increase with age and cigarette smoking in the absence of exposure to asbestos (33). After adjustments were made for age and smoking status, the talc workers who had 15 years or more had a slightly higher prevalence of both rounded and irregular opacities than did potash workers with 15 or more years of work experience." This comparison hardly seems appropriate since potash miners have a low risk for developing occupational opacities.

Table 7 relates the cases with only x-ray findings of opacities to other factors such as age, dust exposure at GTC, duration of employment, smoking history, FVC and %FEV₁, current occupation, and prior dust exposure. Table 8 provides the same information for cases with pleural thickening with or without complication such as opacities and pleural calcification.

The one case of 1/1 opacity had 5.5 years of service at GTC but had worked previously in a talc mine. His film was within normal limits in 1974 and 1976. No film was available in 1978, and 1/1 in 1979.

Of the 22 cases of pleural thickening, 10 or 45.5% had been employed at GTC for more than 15 years; 4 (18.1%) from 11-15 years; six (27%) from 6-10 years; and 2 (9%) for less than 6 years.

Of those with 11-15 years of employment at GTC, 2(50%) had prior exposure to talc. In the 6-10 year group, 2 (33%) had prior talc exposure and in the less than 6 year group, 1 (50%) had prior talc exposure.

The NIOSH study reported 10 cases of pleural thickening greater than Grade 1. In the TOMA study, 8 cases of Grade 2, 13 cases of Grade 1 and 1 case of Grade 0 were reported. Of seven cases with pleural calcification, 4 were Grade 2, 2 were Grade 1 and 1 was Grade 0. NIOSH also reported that one of every 3 workers who had worked 15 or more years had pleural thickening.

In the TOMA study, the following relationship between pleural thickening, regardless of grade, and years of employment at GTC was found:

Greater than 15 years	(15)	68.2%
1-6 years	(2)	9.1%
6 - 11 years	(1)	4.5%
Less than 6 years	(4)	18.2%

The following is an excerpt from the NIOSH report relating to a discussion of the significance of pleural thickening.

"The greatest difference between the talc and potash workers was the increased prevalence of pleural thickening in the talc workers, among whom nearly one of every 3 workers who had worked 15 years or more had pleural thickening. Pleural thickening can be nonoccupational in origin (e.g., hemothorax, tuberculosis, emphysema, broken or fractured ribs), in which case the thickening is usually unilateral (34, 35). Bilateral pleural thickening is generally considered an indication of exposure to asbestos and may be the most common radiographic abnormality (36,37). The highest prevalence is associated with exposure to anthophyllite and tremolite (35, 38-40).

Both of these fiber types were present in the talc of this study. Pleural thickening has been observed both in the presence and absence of parenchymal fibrosis (40-42). Normal pulmonary function tests are expected in persons with pleural thickening (32) although several studies (including this one) have shown an association between decreased FEV₁ and FVC and pleural thickening (43-46).

"A concern about pleural thickening is its possible association with cancer. Bronchial carcinoma is more frequent in men with pleural plaques (17); shipyard workers with pleural thickening are at increased risk of developing mesothelioma (47), and there is a case report in which pleural thickening may have been premalignant (48). On the other hand, an association of neoplasia and pleural thickening has not been seen when the exposure is to anthophyllite (49), because the incidence of pulmonary and pleural neoplasms is rare in comparison to the high incidence of pleural thickening (39)."

It should be noted, however, that the NIOSH concept of "asbestos fiber" is not generally accepted by mineral scientists.² The tremolite and anthophyllite "fibers" found in the talc studied by NIOSH would be considered non-asbestiform particles by accepted mineralogical practice. Also, the reference to anthophyllite mined in Finland (49) concerned anthophyllite asbestos.²

2-7A

TABLE 7

Summary of Cases with Opacities
but Without Other Pulmonary Complications

Case No.	Grade	Age	Dust Exposure at GTC	Work Span at GTC	Total Work Span	% of Work Span at GTC	Smoking History	FVC	FEV ₁	Current Occupational at GTC	Prior Dust Exposure	Attributable to GTC
0026	0/1	45	M	5.5	27	20.3	C	N	N	Machinist	PT	No
0028	0/1	34	S	7.6	16	47.5	P	N	M	Diamond Driller	NTM	Possible
0040	1/0	44.8	S	5.3	27	19.6	C	M	N	Packer	PT	Not likely
0046	1/0	49.9	S	15.3	32	47.8	C	M	N	Trammer	NTM	Yes
0059	1/0	39	M	5.2	21	24.7	C	N	N	Quality Control	NKD	Not likely
0087	0/1	56	SD	10.2	38	26.8	C	M	N	Janitor	NTM	No
0088	0/1	59.9	S	29.4	42	70.0	C	N	N	Truck Driver	PT	Yes
0139	1/1	41	SD	5.5	24	23.9	C	N	N	Mobile Eq. Op.	PT	No
0023	0/1	49	M	7.0	31	22.5	P	N	N	Maintenance	NTM	Possible
0025	1/0	61	M	5.0	43	11.6	N	MO	N	Watchman	PT	No
0038	0/1	41	S	5.0	23	21.7	N	N	N	Crusher Op.	NKD	Possible
0121	0/1	55	M	5.0	37	13.5	C	M	N	Maintenance Mech.	PT	No
0145	0/1	43	M	22	25	88.0	C	N	N	Welder	PT	Yes
0151	0/1	31	M	5	13	38.4	C	N	M	Quality Control	NMD	Possible

PT Prior talc exposure in a talc mine or mill.
 NTM Prior exposure to a mineral dust in a non-talc mine or mill.
 NMD Prior exposure to a non-mineral dust.
 NKD Prior employment in an occupation without a known dust exposure.

Smoking History:
 C = Current Smoker
 P = Past Smoker
 N = Nonsmoker

FVC and %FEV₁
 N = Normal
 M = Mild
 NO = Moderate

2-88

TABLE 8

Summary of Cases with Pleural Thickening
and Other Pulmonary Complication

Case No.	Grade	Other Complications*	Age	Dust Exposure at GTC	Work Span at GTC	Total Work (Total)	% of Work Span at GTC	Smoking History	FVC	FEV ₁	Current Occupation GTC	Dust Exposure	Prior Attributed to GTC
0004	OBA-2	t 1/0	48	S	5.5	30	18.3	C	M	N	Laborer	PT	No
0008	OBC-1	PC-2	55	N	31.2	37	84.3	P	N	N	Adm.	NTM	Yes
0015	BBC-2		60	S	30.5	42	72.6	P	S	N	Mill Foreman	PT	Yes
0042	LLB-1	t 0/1	56	N	29.7	38	78.1	P	M	N	Adm.	NKD	Yes
0043	ORB-2		50	S	25.0	32	78.1	P	N	N	Packer	NKD	Yes
0057	ORA-2		56		25.1	38.1	65.9	N	N	N	Hoistman	PT	Yes
0058	OLA-1	PC-1	39		8.1	21	38.5	N	N	N	Quality Control	NTM	Possible
0069	OBC-2	t 1/0	58	S	1.1	40	2.8	P	MO	N	Mill Foreman	PT	No
0072	BBC-2	PC-2	53	S	25.4	35	72.6	P	N	N	Packer	NMD	Yes
0075	ORB-1	PC-1	52	S	29.6	34	87	P	N	N	Crusher Oper.	NTM	Yes
0081	ORB-1		55	S	30.5	37	82.4	N	N	N	F.M. Oper.	NMD	Yes
0086	OLB-1	PC-2	55	S	11.1	37	30.0	N	N	N	Wheeler Oper.	PTM	Possible
0092	OBA-1	PC-0	48	S	13.0	30	43	P	N	N	Packer	NTM	Yes
0103	OLA-1		47	S	5.4	29	18.6	N	N	N	Hardinge Oper.	PT	Not Likely
0121	LBC-2	PC-2	55	M	5.5	37	14.8	C	M	N	Mech.	NTM	Likely
0132	ORB-1		51	S	21.1	33	63.9	C	N	M	Trammer	NTM	Yes
0133	ORB-1		41	M	5.6	23	24.3	P	N	N	Sheet Metal Wkr	NTM	Questionable
0135	LLA-1		50	SD	11.7	32	36.6	N	M	N	Mobile Util. Op.	PT	Possible
0145	OLA-1		43	M	22.5	25	90	C	N	N	Laborer	NMD	Possible
0159	OLA-1		20	S	1.3	2.0	65	C	N	N	Laborer	NMD	Not Likely
0161	B00-0		36	M	11.6	18	64.4	C	M	N	Millwright	NKD	Yes
0038	OLB-2	t 0/1	41	S	5.5	23	23.9	P	M	M	Crusher Oper.	NKD	Possible

* PC = Pleural classification
t = opacities.

Note: Two cases of pleural thickening detected in 1978 were not x-rayed in 1979 and do not appear in this summary. These are case Nos. 0032-0077.

VII. PULMONARY FUNCTION (1979)

Pulmonary function examinations were performed on all employees to determine the presence or absence of pulmonary abnormalities of the respiratory system. Two values were determined; Forced Expiratory Vital Capacity (FVC) and the Forced Expiratory Volume in 1 second (FEV_1). FVC is obtained by having the worker exhale into a spirometer and the total volume of air exhaled is measured. The predicted FVC was calculated from a standard formula which considered age, height, sex and race of tested individuals. The FVC is reported as a percentage of the predicted value. An abnormal FVC is indicative of restrictive lung disease and is a common finding among individuals exposed to talc dusts. Workers exposed to talc dust can develop a reduced FVC before evidence of pleural disease is evident on an x-ray film.

FEV_1 is determined by measuring the volume of air exhaled in one second under forced expiratory conditions.⁵ The ratio of this value to the actual volume determined by FVC is the percent one-second forced expiratory volume ($\%FEV_1$). A reduced $\%FEV_1$ is indicative of an obstructive lung disease or a narrowing of the airways. Obstructive and restrictive disease may be present in persons with advanced pneumoconiosis.

The following is an example of the method of determining FVC AND $\%FEV_1$:

FVC

Actual measured volume from forced expiration corrected for temperature -
4.5 liters
Predicted volume - 5.0 liters
 $\%$ predicted = 90%

$\%FEV_1$

Measured 1 second volume from forced expiration - 3.0 liters Actual FVC
volume - 4.5 liters
 $\% FEV_1 = 66.6\%$

The classifications used for FVC and %FEV₁ are identical to those on page 7.

Table 9 is a summary of FVC and %FEV₁ for the 151 persons participating in the pulmonary function tests.

TABLE 9

Results of FVC and %FEV₁ for all Cases. 1979 Results

	FVC	
	Number	Percent
Normal	108	71.5
Mild	40	26.5
Moderate	2	1.3
Severe	<u>1</u>	<u>0.7</u>
TOTAL	151	100.0
	%FEV ₁	
	Number	Percent
Normal	147	97.4
Mild	4	2.6
Moderate	0	0.0
Severe	<u>0</u>	<u>0.0</u>
TOTAL	151	100.0

2-EE

Based on previous studies, smoking is not considered to be a factor for a deficit FVC. Cigarette smoking may transiently alter certain pulmonary function tests, particularly the forced expiratory flow rates. This effect may be pronounced for an hour after smoking. Fixed airways obstruction eventually occurs in many smokers and lower values for FEV₁ and FEV₁/FVC% may be expected in long term smokers. Other investigators have reported that exposure to talc (type unspecified) may produce restrictive pulmonary impairment, as evidenced by a deficit FVC.³ Restrictive pulmonary impairment is also present in workers exposed to cotton dust, asbestos and other silicates. Obstructive pulmonary impairment is reflected by a reduced %FEV₁. Among workers exposed to silica, pulmonary function tests usually are normal until the onset of dyspnea, at which time an impairment with features of obstructive and restrictive impairment may be found.³

Table 10 is an analysis of FVC by smoking history.

TABLE 10

FVC By Smoking History. 1979 Results

Smoking Status	Total Cases	Normal		Mild		Moderate		Severe	
		No.	%	No.	%	No.	%	No.	%
Current	69	48	69.6	21	30.4	0	0.0	0	0.0
Past	38	29	76.3	8	21.0	1	0.0	1	2.6
Non	44	31	70.5	11	25.0	1	4.5	0	0.0
TOTAL	151	108	71.5	40	26.5	2	1.3	1	0.7

2-FP

There is no statistically significant difference in FVC between the current smoking group and the non-smoking group, ($p = .81$), or between past smokers ($p = .81$) and current smokers ($p = .24$)

Three of the four cases of mild pulmonary obstructive impairment ($\%FEV_1$) occurred in current smokers and one in a non-smoker. Two cases have pleural thickening; one a current smoker and one a non-smoker.

Table 11 was constructed to determine if opacities and pleural thickening had an effect on pulmonary restrictive disease.

TABLE 11

Relationship Between Restrictive Impairment (FVC)
and Cases with Opacities, Pleural Thickening
and Cases without Opacities and Pleural Thickening

Case Type	Normal		Mild		Moderate		Severe		Total
	No.	%	No.	%	No.	%	No.	%	
With Opacity (Table 7)	9	64.3	4	28.5	1	7.2	0	0.0	14
With Pleural Thickening (Table 8)	14	63.6	6	27.3	1	4.5	1	4.5	22
Without Opacities and Pleural Thickening	85	74.0	30	26.0	0	0.0	0	0.0	115
TOTAL	108	71.5	40	26.5	2	1.3	1	0.7	151

Among the 115 cases without opacities or pleural thickening, there was no statistically significant difference for FVC between current, past, and non-smokers. Table 12

TABLE 12

FVC of Cases without Opacities or Pleural
Thickening by Smoking History

	Normal		Mild		Moderate		Severe		Total
	No.	%	No.	%	No.	%	No.	%	
Current	39	73.5	14	26.4	0	0	0	0	53
Past	21	77.8	6	22.2	0	0	0	0	27
Non	<u>25</u>	71.4	<u>10</u>	28.6	0	0	0	0	<u>35</u>
TOTAL	85	74	30	26.0	0	0	0	0	115

Persons with opacities and pleural thickening have an abnormal FVC rate of 36 per 100 as compared to 27 per 100 without either opacities or pleural thickening.

In the pleural thickening group, 4 of the 22 cases also had opacities. One of these cases did not have a pulmonary function test. If these three cases were classified in the opacity group, the rate of abnormalities for those with opacities would be 50 per 100 as compared to 22 per 100 for those with pleural thickening and 26 per 100 without either condition. Table 13 shows this relationship.

2-11

TABLE 13

Effect of Classifying 3 Cases of Pleural
Thickening with Opacities in the Opacity Group

	Normal	Mild	Moderate	Severe	Total
Opacity (4 cases with pleural thickening)	9 (50%)	6 (38%)	2 (6.1%)	0 (0.0%)	18
Pleural Thickening (without opacity)	14 (77.7%)	3 (16.6%)	0 (0%)	1 (5.7%)	18
Without Opacities or Pleural Thickening	85 (74%)	30 (26%)	0 (0%)	0 (0%)	115
TOTAL	108 (71.5)	40 (26.5)	2 (1.3)	1 (0.7)	151

If pulmonary function is related to years of dust exposure, this should be reflected by years of employment. The relationship between years of employment at GTC and normal FVC is shown in Table 14.

277

TABLE 14

Relationship of Normal and Abnormal FVC
to Years of Employment at GTC

Years of Employment	Number	FVC			
		Normal No.	%	Abnormal No.	%
0-5	80	60	75.0	20	25.0
6-10	22	16	72.7	6	27.2
11-15	18	12	66.7	6	33.3
16-20	7	5	71.4	2	28.6
20-25	14	9	64.3	5	35.7
25	<u>10</u>	<u>6</u>	<u>60.0</u>	<u>4</u>	<u>40.0</u>
TOTAL	151	108	71.5	43	28.47

There is an increasing percentage of FVC abnormalities as the years of employment increase, the single exception being in the 16-20 year group. This group is so small that one case would make a substantial difference. One case, in the 16-20 year group, was borderline (84%) while two abnormal were clearly in the abnormal category (64% to 68%). The significant break appears to occur in the 11-15 year group. If all cases greater than 16 years were included as a single category then the percentage of normals would be 64.5 and abnormal 35.5. This effect should not be influenced by smoking habits or age. This group, however, does contain individuals who were employed by companies other than GTC.

2-44

Table 15 was constructed to eliminate the influence of other talc exposure. All workers with less than 5 years employment at GTC and workers who had less than 50% of other employable years (age 18) at GTC but were previously employed in a talc industry were eliminated from Table 14.

TABLE 15

Workers Whose Significant Exposure
to Talc was at GTC

Years of Employment	Total	FVC			
		Normal		Abnormal	
		No.	%	No.	%
0-5	53	47	88.7	6	11.3
6-11	21	15	71.4	6	28.6
11-15	18	12	66.7	6	33.3
16-20	7	5	71.4	2	28.6
21-25	14	9	64.3	5	35.7
25	<u>10</u>	<u>6</u>	<u>60.0</u>	<u>4</u>	<u>40.0</u>
	123	94	76.4	29	23.6

Thus, it appears that exposure to talc dust at GTC can result in restrictive pulmonary disease. A significant break occurs after 6 years of exposure to talc.

Again, Table 15 shows an overall trend of decreased FVC with increasing length of employment. In fact, Tables 14 & 15 are identical except for the first two groups (0-5 yrs; 6-11 yrs).

2-4

IX. RESPIRATORY QUESTIONNAIRE

Each person examined in 1978 was requested to complete a respiratory questionnaire based on the form recommended by the American Thoracic Society. A shorter and modified form was used in 1979.

This questionnaire obtains information on the frequency of cough, production of phlegm, the presence of wheezing and shortness of breath, and smoking history.

In 1978, one hundred forty-one persons completed the questionnaire. Results of the questionnaire are presented in Tables 18-25.

TABLE 18

Distribution of Persons By Smoking History

<u>Status</u>	<u>No.</u>	<u>%</u>
Current Smokers	64	45.4
Past Smokers	33	23.4
Never Smoked	<u>44</u>	<u>31.2</u>
TOTAL	141	100.0

Table 19

Distribution of 141 Persons by Symptoms

<u>Status</u>	<u>No.</u>	<u>%</u>
Chronic or Persistent Cough	45	31.9
Phlegm	52	36.9
Wheezing	60	42.5
Breathlessness	43	30.5
No. Symptoms	53	37.6

Table 20

Distribution of 141 Persons by Number of Symptoms

<u>Status</u>	<u>No.</u>	<u>% of Total</u>	<u>% of Persons with Symptoms</u>
No Symptoms	53	37.6	35.2
One Symptom	31	22.0	25.0
Two Symptoms	22	15.6	25.0
Three Symptoms	19	13.5	21.6
Four Symptoms	<u>16</u>	<u>11.3</u>	<u>18.2</u>
	141	100.0	100.0

* Does not add to 100% because of multiple symptoms in some individuals.

2-NN

TABLE 21

Distribution, of Symptoms by Smoking History
All Workers

<u>Smoking Status</u>	<u>Number of Persons</u>	<u>1 or More Symptoms</u>	<u>% of Total</u>	<u>No Symptoms</u>	<u>% of Total</u>	<u>Ratio of Symptoms to no Symptoms</u>
Current Smoker	64	51	79.6	13	20.3	3.9/1
Past Smoker	33	19	57.6	14	42.4	1.36/1
Non-smokers	<u>44</u>	<u>19</u>	<u>43.2</u>	<u>25</u>	<u>56.8</u>	<u>.76/1</u>
Total	141	89	63.1	52	36.9	1.7/1

Thus, the occurrence of respiratory symptoms, as defined by the questionnaire, occurs approximately 5 times more frequently in current smokers and 2 times more frequently in past smokers as compared to non-smokers. The greater number of symptoms in current smokers as compared to non-smokers is statistically significant ($p = .005$) while the difference between past smokers and non smokers is not statistically significant.

200

X. OTHER MEDICAL FINDINGS (1978)

Medical findings of the workers revealed no startling information. Pulmonary diagnoses were consistent with other laboratory data. The distribution of medical findings was no different than that which would be expected in any other group of similarly aged persons. Table 22 shows the distribution of clinical diagnoses.

TABLE 22

Results of Clinical Diagnoses

<u>Condition</u>	<u>Number of persons with diagnosis</u>
High Blood Pressure	7
Skin Conditions	6
Heart Conditions	5
Upper Respiratory Conditions	2
Hernia	2
Scoliosis (curved back)	2
Eye Conditions	2
Other Conditions	2

Two workers were observed with a dermatitis which appeared to be related to the milling of a new rock. Personal protective recommendations were made for preventing this condition.

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XI. SUMMARY OF OBSERVATIONS

1. Exposure to industrial talc dust produces a mild form of pneumoconiosis. Among 151 persons examined in 1979, there were 18 workers with x-ray evidence of small irregular opacities. However, only one case was classified as 1/1, or definite pneumoconiosis, in the ILO/UC classification system. Fifteen cases were in the suspect category. Three of the 18 cases also had evidence of pleural thickening.

2. Pleural thickening was found in 22 cases; in seven cases, pleural calcification was also present. Pleural thickening has been reported as a frequent finding in talc workers by other investigators. All cases of pleural thickening had worked at GTC or other talc plants; 7 cases had previous talc exposure while 15 cases had talc exposure only at GTC. The NIOSH mortality study indicated that about one-third of workers with 15 or more years of exposure to talc had evidence of pleural thickening; a similar relationship was found in this study. Seventeen of the 22 cases of pleural thickening had 15 years or more exposure to talc when both GTC and other talc exposures were combined. Five cases had talc exposure only at GTC and all had less than 15 years exposure to talc (8.1, 5.5, 5.6, 1.3 and 5.5 years).

3. The results of the sputum cytology tests showed no cells in the Class III and IV or V category. 16.3% of the persons with an acceptable sputum sample had Category II or atypical cells and 83.7% had a Class I or normal cytology.

4. Based on the results of pulmonary function examinations, a large proportion of the examined workers had a reduced Forced Expiratory Vital Capacity (FVC), which is indicative of restrictive pulmonary disease. Cigarette smoking is not a factor in the production of abnormal FVC. A reduction in FVC appears to be related to years of employment at GTC. After an exposure period of 5 years, the percentage of workers with an abnormal FVC increased by years of employment. Workers with opacities have a higher rate of abnormal FVC than workers with pleural thickening or workers with normal x-rays.

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5. In a questionnaire relating to the presence of symptoms referable to respiratory diseases, such as coughing, production of phlegm, wheezing, and breathlessness, 62.4% of the examined workers indicated the presence of one or more of these symptoms. An analysis of these data showed that smoking rather than dust was the predominant factor in the development of respiratory symptoms.

6. There is no significant difference between the clinical findings of the NIOSH study of 1975 and the TOMA studies of 1978 and 1979. TOMA reported more opacities than NIOSH. This difference is due to the fact that TOMA reported opacities of less than Grade 1. NIOSH reported two cases of opacities greater than Grade 1, while TOMA reported only one Grade 1. TOMA reported more cases of Grade 1 & 2 pleural thickening. This could be the result of an additional four years of exposure.

NIOSH attributed its findings of pleural thickening and restrictive pulmonary impairment to asbestos fibers in the talc. In view of the Company's mineralogical description of the talc being produced in Mines #1 and #2 and the MSHA study which reported no asbestos fibers in excess of 0.011 fiber/ml, it appears that the pathology found in the TOMA study is attributed to exposure to the mineral talc. Evidence, at this point in time, does not implicate industrial talc produced at GTC, as a carcinogenic agent.

2-RR

XII. RECOMMENDATIONS

1. The R. T. Vanderbilt Company should implement a stringent dust monitoring and control program at the Gouverneur Mine and Mill. A target for dust control should be the lowest feasible respirable dust concentration.

2. The pre-employment medical examination should continue to exclude any person with x-ray evidence of pneumoconiosis, pleural disease, or an abnormal pulmonary function test from employment in operations with dust exposure.

3. The work environment of all persons with opacities or pleural thickening should be thoroughly evaluated. If the dust concentration is above 1 mg/m^3 as a TWA, consideration should be given to moving these workers to a job where the exposure is within this limit. If transfer to another job is not feasible they should be fitted with a proper respirator, if able to wear one. A battery powered respirator may be a solution for these individuals.

4. The Company should continue its program of examining workers every two years in the first ten years of work experience and annually after ten years. The examination should include an interval work history, chest x-ray, pulmonary function test and a physical examination. The chest x-ray should not be given more frequently than every two years unless required for medical purposes. Workers with opacities or pleural thickening should be seen annually by a physician.

5. The program for use of respirators when indicated, should be continued.

6. The Company should continue to advise workers of the potential health hazards associated with high exposures to talc and the need for personal health practices.

7. The R. T. Vanderbilt Company should indicate to users of Gouverneur talc that if workers are exposed to excessive airborne concentrations for an extended period, some may develop talcosis. (Note: A label is now being used for this purpose).

8. An advisory industrial hygiene service should be established to advise users on preventive control programs. A sample of users should be surveyed to determine the extent to which hygienic precautions are being applied. (Note: This program has already started).

2-77

XIII. CONCLUSION

Exposure to industrial talc dust produced by GTC causes a pneumoconiosis-talcosis. First evidence of the disease is a reduced pulmonary vital capacity which is evident in some individuals after an exposure of more than five years to talc dust. After 25 years, the prevalence of restrictive pulmonary disease may be as high as 40%.

Talcosis may also be complicated by pleural thickening, with or without calcification, and may be unilateral or bilateral. Among the workers at GTC, bilateral was more frequent than unilateral. The prevalence of both forms was 14.5%; however, some workers may have been exposed to high concentrations of talc or other mineral dusts in their previous employment. Pleural thickening was evident in most cases after an exposure period of 15 years but some cases are evident with as little as 5 years of exposure.

Pneumoconiosis, as evidenced by small irregular opacities, usually in both lung fields, can be present but occurs with less frequency than pleural thickening. In this group, the prevalence of all grades of opacities was 11.8%. As in the case of pleural thickening, some workers had an earlier exposure in another talc operation. The pneumoconiosis is a mild type; there was only one case of ILO/UC Grade 1/1. Opacities usually do not develop until after 15 years of exposure.

The prevalence of restrictive pulmonary disease among workers with opacities is significantly greater than among workers with pleural thickening or with normal chest x-rays.

The presence of talcosis, as evidenced by pleural thickening and opacities among GTC workers, may be the result of earlier dust concentrations in the mill and mine. However, since mild restrictive pulmonary disease is occurring among workers in the 6-10 year employment range, it is possible that present dust concentrations may not be sufficiently low to prevent the development of this condition.

The present standard for non-asbestiform talc is 3 mg/m^3 for respirable dust. This study did not permit a determination of the adequacy of the 3 mg/m^3 standard. Because of the apparent relationship of exposure to talc dust and mild restrictive pulmonary diseases, it is recommended that dust concentrations be maintained as low as technical feasibility permits but not in excess of 3 mg/m^3 .

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An Evaluation of
 Lung Cancer Mortality
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 of the
 Gouverneur Talc Company

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2-8

TABLE

Introduction	1
Summary	2
Issues to be Addressed	5
Cases Reviewed	6
Analysis Criteria	6
Evidence of Carcinogenicity.	7
Dose-Response	9
Latency Period	12
Prior Exposure to Carcinogenic Agents.	13
Comparison of Exposure - Talc and Underground Mines.	18
Occupations at GTC	21
Relationship Between Morbidity and Mortality Among Surface and Underground Workers	23
Case Analysis	24
Comparison of Results Between Two NIOSH Talc Mortality Studies	29
Evaluation of the Issues	35
Conclusion	38
Tables	
Table 1 -	10
Table 2 -	11
Table 3 -	16
Table 4 -	17
Table 5 -	19
Table 6 -	20
Table 7 -	22
Table 8 -	23
Table 9 -	27
Table 10 -	30
Table 11 -	34

3-D

AN EVALUATION OF LUNG CANCER
AMONG TALE AND EMPLOYEES
OF THE
GOUVERNEUR TALC COMPANY

Introduction

In 1975, the National Institute for Occupational Safety and Health (NIOSH) initiated a series of morbidity and mortality studies of talc mine and mill workers. The first of these studies was conducted in upper New York state at the Gouverneur Talc Company, a subsidiary of the R. T. Vanderbilt Company. Similar studies were conducted of talc workers in the states of Vermont, North Carolina, Texas and Montana.

NIOSH defined the New York talc as talc containing asbestos and those from the other states as talc free of asbestos. In its published reports, NIOSH reported an excess of lung cancer deaths among Gouverneur ^{1/} and Vermont ^{2/} talc workers. Mortality studies of North Carolina, Texas and Montana talc workers have not been completed. In the Gouverneur study, investigators reported an increase in the number of deaths due to bronchogenic cancer but stated that confounding factors, other than talc, must be taken into consideration before the observed mortality can be attributed to occupational exposure at this talc mine and mill. However, it was recommended that all provisions of the Occupational Safety and Health Administration (OSHA) standard for asbestos should be followed in the production and subsequent use of these talcs. NIOSH stated that the excess of lung cancer deaths among Vermont talc

3-E

workers was small and that occupational exposures, other than talc, were not a significant factor.

In all five morbidity studies, 1/, 2/, 3/ NIOSH reported pleural thickening and reduced pulmonary vital capacity as a common finding among workers with long-term exposure to industrial talc.

Based on mineralogical studies of the talc produced by the Gouverneur Talc Company and the short term exposure to talc of some of the workers whose deaths were due to lung cancer, the R. T. Vanderbilt Company questioned the validity of the NIOSH recommendation that the asbestos standard should be applicable to Gouverneur talc. In 1977, the company requested Tabershaw Occupational Medicine Associates (TOMA) to evaluate the causal relationship of the excess lung cancer rate among employees of the Gouverneur Talc Company. This report presents the results of this evaluation.

Summary

Based on an analysis of the work histories of 13 cases of bronchogenic cancer representing 2606 person years of employment at Gouverneur Talc Company (GTC) and 8733 person years at risk of dying, evidence does not support the hypothesis that there is a causal relationship between exposure to Gouverneur talc and the incidence of lung cancer.

This conclusion is based on the following facts:

1. Seven of the 13 cases were employed at Gouverneur for less than 1 year; six of these cases were employed from 8 to 54 days. Evidence from other investigations indicates that if talc exposure causes lung

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cancer, this carcinogenic effect is manifested after an exposure period of 15-24 years. ^{4/} One of these seven cases developed lung cancer after 4½ months of employment at GTC. If this case were occupationally related, the exposure to a carcinogenic agent must have occurred before his employment by GTC.

2. Ten of the 13 cases, or 77%, were employed at Gouverneur in underground occupations either as miners or in mine maintenance. Seven of the 10 had been previously employed by an underground metal mining company.

3. Eight of the 13 cases, or 62%, had been employed by an underground metal mining company, seven before Gouverneur employment and one post Gouverneur. In all cases, the duration of employment by companies engaged in underground metal mining was greater than the duration at Gouverneur.

4. Only three cases occurred among surface workers, one in a mill operator and two in surface maintenance workers. Prior to 1960, exposure to airborne dust was greater among mill operators than among underground personnel.

5. Non-malignant respiratory disease, caused by exposure to dust, occurred twice as frequently in surface workers as in underground workers. However, bronchogenic cancer occurred 9 times more frequently among underground personnel. If lung cancer were caused by exposure to talc, the frequency should be greater among surface workers.

6. In a mortality study of Vermont talc workers, NIOSH observed six lung cancers as compared to an expected number of 3.69. Five of the six, or 83%, occurred in underground personnel as compared to 10 of 13, or 77%, at GTC. NIOSH attributed the excess lung cancer deaths among Vermont workers to environmental factors other than talc and implicated radon as a possible causal agent. The chi square test of significance, based on the number of person-years at risk of dying in the two studies, shows no statistical difference between the lung cancer rates in the two studies. The talc produced by the Vermont mines was identified by NIOSH as asbestos free while the talc produced by Gouverneur, according to NIOSH, was a talc containing asbestos.

7. Because the high proportion of talc workers dying of lung cancer had a longer period of employment by companies engaged in underground metal mining, the role of these exposures, either singly or in combination with talc, needs to be investigated.

8. Cigarette smoking correlates with the causation of lung cancer. The smoking patterns of workers in both the Gouverneur and Vermont cohorts are largely unknown and, therefore, could not be evaluated. This problem is common to most retrospective cohort studies.

9. Although Kleinfeld, et al identified an overall proportional morbidity due to carcinoma of the lung among New York state talc workers, some of the findings were at variance with the finding among asbestos insulators. When carcinoma of the lung and pleura were related to each of six 5 year periods, the expected mortality for the

period 1960-1964 and 1965-1969 approached the expected mortality. This improved mortality was attributed to appreciable differences in dust concentrations. Exposure to other potential carcinogens was not reported.

Issues To Be Addressed

The NIOSH mortality study of GTC workers, employed for any time period between 1/1/48 and 12/31/60 and who died between 1/1/48 and 12/31/76, demonstrated an excess number of deaths due to bronchogenic cancer. However, because of the complexity of exposures to other carcinogenic agents, both prior to and after employment by GTC, there is the possibility that some or all of these bronchogenic cancers may have been caused by an environmental agent either in the pre- or post GTC employment period.

In a subsequent study of Vermont talc workers ^{2/}, NIOSH included in the cohort only male workers who had received an annual chest roentgenogram by the Vermont Department of Health and had been employed in Vermont talc mines for one or more years. NIOSH identified the GTC product as talc containing asbestos and the Vermont talc as asbestos free.

This report examines the following questions:

1. Can the excess bronchogenic cancer rate be attributed to talc exposure at GTC?

2. Can the excess rate be attributed to talc exposure at GTC combined with other talc mines and mills?
3. Can the excess rate be attributed to other environmental carcinogens encountered during pre- or post GTC employment?
4. Is there a significant difference between the NIOSH findings of excess bronchogenic cancers in the Vermont and GTC studies?

Cases Reviewed

Work histories were reviewed of 13 bronchogenic cancers, one adenocarcinoma of the mediastinum, and one mesothelioma among workers employed for some time period between 1/1/48 and 12/31/60 and who died between 1/1/48 and 12/31/76. This is an additional four cases to the 9 cases of bronchogenic cancer included in the NIOSH study, since NIOSH used a cutoff date of 6/15/75 as compared to a TOMA cutoff date of 12/31/76. In its analysis NIOSH did not include the mesothelioma and adenocarcinoma cases, since there is no evidence that either of these conditions is associated with talc exposure. For purposes of comparability, only the 13 cases of bronchogenic cancer will be included in this analysis.

Analysis Criteria

It is not possible to determine the etiology of any single bronchogenic cancer case. Bronchogenic cancer attributable to exogenous causes have implicated smoking, chemical carcinogens acting either singly or in combination with another agent, and radiation. Bronchogenic cancer also occurs without an environmental cause.

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When an excess of bronchogenic cancer deaths occurs in a group of industrial workers, the excess can be attributed to an environmental carcinogen. The etiologic of any single case remains in doubt. Exposure to the carcinogen may have occurred in the industry under study or it may have occurred in a previous or post employment situation. There are, however, certain criteria which can be used to establish probability of occupational cause. These are:

1. There must have been exposure to a carcinogen.
2. The dose must have been sufficient to induce a carcinogenic action. This dose can range from a very small mass for some agents to a very large mass for others. In the case of asbestos, the dose is not known but it is known that the duration of exposure enhances the risk for developing lung cancer.
3. Usually there is an extended period between the initial exposure to the carcinogen and the diagnostic stage of bronchogenic cancer. For asbestos and other mineral dusts, known to cause bronchogenic cancer, this latent period is about 20 years with 15 years as a minimum.

Evidence of Carcinogenicity

Kleinfeld, et al ^{4/} have conducted a series of studies of New York state talc workers which identified an overall proportional mortality due to carcinoma of the lung and pleura of approximately

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four times expected. In these studies, a significant increase appeared to occur in the age group of 60 to 79 years rather than in the 40-59 year age group. This finding among talc workers is at variance with what the authors observed among asbestos insulators where the observed values in both the 40-59 and 60-79 year age group were significantly different from the expected values. When carcinoma of the lung and pleura were related to each of six 5 year periods, the observed proportional mortality from carcinoma of the lung was approximately four times the expected mortality during the years 1945 to 1959 and dropped to approach the expected mortality in 1960-64 and 1965-69. The differences between the observed and expected mortality rates were significant in 1950-54 ($p < 0.01$) and insignificant in 1960-64 and 1965-69 ($p > 0.05$). The improved mortality experience between 1960 and 1969, in the case of lung and pleural cancers, was attributed to an appreciable reduction in dust counts in the mines and mills through environmental controls.

Environmental exposure data were available for 97 of the 108 death cases. The mean duration of exposure for this group was 24.1 years with a range of 15 to 47 years. The dust was identified as talc, tremolite, anthophyllite, carbonate dusts and a small amount of free silica. The majority of the respiratory tract malignancies occurred in workers exposed 15 to 24 years. According to Kleinfeld, the findings suggest that the carcinogenic effect of commercial talc is manifested mainly after exposure of 15 to 24 years and that very prolonged exposure, 25 years plus, does not appear to carry with it a significantly increased risk for cancer production. His study cohort

included all workers employed in 1940 who had accumulated 15 or more years of exposure to commercial talc, as well as those who achieved a minimum of 15 years of such exposure between 1940 and 1969. Occupational histories of lung cancer deaths were not included in the paper.

The relationship between radon daughter exposure in uranium mines and an excess rate of carcinoma of the lung has been well established. Radon is known to occur in all underground metal mines but a causal relationship with an excess rate of carcinoma of the lung in non-uranium mines has not been investigated even though such a relationship is suspected.

Dose-Response

Although there is insufficient environmental data to develop a dose-response relationship in the GTC cohort, dose being the average exposure of an individual worker to airborne dust times the number of years of exposure, a rough estimate of such a dose-response relationship can be estimated by considering the length of employment for each case. If a dose-response relationship exists, there should be an increasing incidence observed as the duration of the exposure increases. The relationship between years of employment at GTC and the occurrence of bronchogenic cancer is shown in Table 1. Seven of the 13 cases were exposed for less than 1 year, and the percentage of deaths in each category is about the same for all. There is no clear gradient in the number of bronchogenic cancer cases observed with respect to the number of years of exposure at GTC.

3-12

Table 1

Work Period at GTC for 13 Cases of Bronchogenic Cancer

Work Period	No. of Persons		No. of Cases		% of Persons in Work Period Dying of Lung Cancer
	No.	%	No.	%	
0-3 mo. 3 mo. - 1 yr.	187	45.1	5 2	53.8	3.7
1-5 yrs.	76	18.3	3	23.0	3.9
5-10 yrs.	31	7.4	0	0.0	0.0
10-15 yrs.	27	6.5	1	7.7	3.7
15-20 yrs.	28	6.7	2	15.4	7.1
> 20 yrs.	58	14.0	0	0.0	0.0
Unknown	8	1.9	0	0.0	0.0
Total	415	100	13	100	3.1

Among the 13 TOMA cases with bronchogenic cancer there were 56 person-years of GTC employment, with 254 person-years at risk of dying. This group had 2.7% of the total person-years at risk of dying (2606), while those in the TOMA cohort without bronchogenic cancer deaths accounted for 97.3% of the person-years at risk of dying. Since the group with bronchogenic cancer had a short time exposure to airborne dust, while those without bronchogenic cancer had a longer duration of exposure, it would appear that these cancers were not dose related. The group dying of bronchogenic cancer accounted for 56 person-years of exposure, or 2.1% of the total number of person-years of exposure (2606), while the group without bronchogenic cancer accounted for 97.9%. These relationships are shown in Table 2.

Table 2

Comparison of Groups With and Without Bronchogenic Cancer
by Person-Years of Talc Exposure at GTC
and Person-Years at Risk of Dying

No. of Cases	Person-Years		Person-Years	
	of Exposure	%	at risk of dying	%
13	56	2.1	254	2.7
0	<u>2551</u>	<u>97.9</u>	<u>8966</u>	<u>97.3</u>
	2606	100.0	9220	100.00

3-0

Latency Period

NIOSH placed the latency period which was determined by the difference between the year of employment at GTC and year of death. This presumes that the cause of bronchogenic cancer was due to the exposure at GTC. Since the date of diagnosis was not available to NIOSH, the date of death was used to determine latency. The true latency period is the difference in years between the initial exposure to the causative agent and the time of diagnosis, which in some cases can be significantly different from time of death. In the 9 NIOSH bronchogenic cancer cases the stated latency period ranged from 12-25 years. Eight of the 9 cases (88.8%) had stated latency periods in the range of 18-25 years. ^{No NIOSH 2/0} This closely approximates the latency period for asbestos.

The latency period for the 13 cases in the TOMA cohort have the following distribution based on the NIOSH method of determining latency.

5 months	-	1	-	7.7
10-14 years	-	1	-	7.7
14-20 years	-	2	-	15.4
21-25 years	-	7	-	53.8
> 25 years	-	<u>2</u>	-	<u>15.4</u>
		13		100.0 %

Confidence cannot be placed in the latency periods shown, since individuals had long work periods after leaving GTC employment and some had a potential for carcinogenic exposure after their separation from GTC. The potential for work experience after leaving GTC is shown in the following distributions:

less than 1 year	-	2	-	15.4%
7 - 10 years	-	2	-	15.4%
10 - 15 years	-	3	-	23.1%
15 - 20 years	-	1	-	7.4%
20 - 25 years	-	<u>5</u>	-	<u>38.5%</u>
		13		99.8%

If latency had been calculated on the basis of previous employment, the latency periods would be longer than those shown. Since complete occupational histories are not available, it is not possible to calculate latency based on previous employment. However, it is known that the latency period for bronchogenic cancer due to radon daughters exposure can be in excess of 20 years.

Thus, the latency period when determined from the date of GTC employment is not a valid relationship for establishing causal effect due to talc exposure at GTC.

Prior Exposure to Carcinogenic Agents

In any historical prospective epidemiologic study it is necessary to determine past exposures, among cohort members, to agents which

3-D

may have caused or contributed to the disease or disability being studied. Three categories of industries, in which GTC workers were previously employed, have potential exposures to agents suspected of causing lung cancer. These include talc mining and processing; construction, where there is the possibility of exposure to asbestos; and underground metal mining where radon, a known lung carcinogen, is frequently encountered.

Based on work histories, contained in the GTC application for employment and other GTC records, the distribution of deaths due to bronchogenic cancer, by previous exposure category and person-years of employment at GTC, is shown in Table 3. Table 4 shows the number of bronchogenic cancer deaths per 100 person-years of exposure at GTC for employees with previous exposure in underground metal mining, talc, and other employment. The greatest number of bronchogenic cancer deaths occurred among those previously employed in underground metal mines.

In Table 4 one case with prior exposure in both talc and underground metal mining was classified in the metal mine category. If this case had been classified in the talc category, bronchogenic cancer death in the metal mine category would have been 0.76 deaths per 100 person years as compared to 0.33 deaths per 100 person years in the talc category. By this distribution there would have been no difference in rate between Talc and All Other categories.

11 120

PLYPHONIC
EXHIBIT NO. 4
DATE 10-2-86
WITNESS: Harvey
N.P. PATRICIA W. VANCELL, CMAA 1979 (b par)

JAN 7 1987

Robert Murray Associates
Consultants in Occupational Health

DR. ROBERT MURRAY, B.Sc., FRCP (Glas.), Hon. D.Tech. (Grad.)
DPH, DH, F.FOM, Hon. F.H.S.O.

ACK 25/8/86 MS

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DR. W. D. BUCHANAN OBE, B.Sc., FRCP (Glas.), DPH
DR. J. L. KEARNS, M.Sc., F.FOM, RCPIII MRCCP
DR. M. L. NEWHOUSE, MD, FRCP

Ref: RM/EMA/49/50
Your ref:

15th December, 1986

Mr. A. Harvey
Director of Environmental Affairs
R.T. Vanderbilt Co. Inc
30 Winfield Street
Norwalk
Connecticut 06855
USA

Dear Mr. Harvey,

As requested by Tabershaw Occupational Medicine Associates, I attach herewith my comments on the TOMA report on lung cancer mortality at the Gouverneur mine. The evidence of association of lung cancer with work in the mine does not stand up to investigation.

There is one point however to which I did not address myself. That is the asbestos content of the Gouverneur talc. There appears to be a difference of opinion between the firm and NIOSH in this respect. I expect that TOMA have analysed and checked the industrial hygiene data in the NIOSH report. I find it confusing in terms of short fibres and electron microscopy findings and these factors may partly account for the discrepancy in the two accounts of asbestos content. Perhaps you would like to take this question up with TOMA.

I apologize for the delay in sending this report but it took some time to examine all the papers. I attach a note of my fee.

Yours faithfully,

Robert Murray
Dr. Robert Murray

ENCS:

4-A

LUNG CANCER MORTALITY AT GOUVERNEUR TALC COMPANY

Comment on a Report by Tabershaw Occupational
Medicine Associates (TOMA)

I have received the report by TOMA on lung cancer mortality among employees at the Gouverneur Talc Company. This is a very carefully argued rebuttal of the mortality findings of the report by NIOSH "Occupational Exposure to Talc Containing Asbestos". I agree with the conclusions of the TOMA report for the following reasons :

1. I find it unacceptable to ascribe cases to talc exposure when 6 of the 13 cases mentioned by TOMA and 4 of those described by NIOSH were employed for short periods up to 54 days. There is no known threshold level of exposure to asbestiform fibres but the general principles of dose/response relationship are accepted.

In general lung cancer epidemiological studies do not take account of exposures of less than one year. Occupational cancer has a long latent period following,

23

or associated with, a long induction period. The validity of the association between exposure and effect decreases as the induction time decreases and vanishes under one year.

2. Experience suggests that dust exposure is greater, or used to be greater, among millers than among miners and that therefore any lung cancer, if attributable to dust, would be more frequent in surface workers. The reverse is true in the Government cases and this also casts doubt on the reliability of the attribution.

3. The occupational history of cases of putative occupational cancer is of the greatest importance. Time and again one finds that the cancer is likely to be attributable to some previous or subsequent exposure rather than the job under investigation. The absence of detailed occupational history data is another factor leading to suspicion of any direct association with talc.

I would have liked to see a chronological account of each case, both the ten cases described by NIOSH and the 13 cases described by TOMA, in terms of all employments since leaving school. For example, of the 10 cases

42

described in Table 32 of the NIOSH report under
'Category A: Cancer of the Respiratory System', I
would make the following observations :

No.	Age at death	Length of employment	Latency	Other previous employment	Observations
1.	63	1 month	21	unknown	eliminated because of short exposure 21 years before and absence of employment data.
2.	54	1 month	23	not sufficiently detailed	eliminated because of short exposure 23 years before and inadequate employment data.
3.	59	1 year	25	data for only 19 months out of approximately 40 years	doubtful because of inadequate employment data.
4.	46	2 months	21	data for only 6 years 4 months out of approximately 28 years	eliminated: short exposure and inadequate employment data

43

No.	Age at death	Length of employment	Latency	Other previous employment	Observations
5.	55	3 years	18	only 11 years accounted for out of 37 years	doubtful: inadequate occupational history.
6.	53	5 years	6	only 16 years accounted for out of possible 35	doubtful: short latent period and inadequate occupational history.
7.	54	2.5 years	24	only 7 years accounted for out of possible 36	doubtful because of inadequate occupational history.
8.	79	1 month	22	unknown	eliminated: it is straining the bounds of credibility to include a man of 79 who had one month's exposure 22 years before with no other information about his work.
9.	39	2.5 years	12	mucker in lead mine: unknown length	very dubious in view of inadequate occupational history suggesting of some other exposure (? smoking) in one so young.

x

No.	Age . death	Length of employment	Latency	Other previous employment	Observation
10	62	17 years	18	unknown	possible in spite of absence of occupational data for 17 years of his working life

Thus the NIOSH evidence of the attribution of lung cancer to talc exposure is as tenuous as to be discarded.

4. The most important confounding factor in any epidemiological study of lung cancer is smoking. The absence of any data on smoking history invalidates any other association, especially where the numbers concerned are so small.

5. The question of small numbers no doubt accounts for the failure of NIOSH to point to the apparent increase in lymphatic and haematopoietic cancers in Table 30A.

6. I would not disagree with the NIOSH recommendations that the talc workers should be followed up and no doubt it is the intention of the company to do so. I would however question their reasons. The work of Baris at Karain in Turkey does not incriminate tremolite but erionite, a form

X

cc: Mr. H. B. Vanderbilt
 Mr. T. T. Noland
 Mr. G. L. Fiederlein
 Dr. C. S. Thompson
 Mr. V. O. Streitmatter
 Mr. G. E. Erdman
 Mr. P. B. Gibney, Jr.
 Dr. K. S. Karsten

A. M. Harve
 C. S. Thompson

November 4, 1976

Handwritten: 11/11/76
 EXHIBIT NO. 5
 DATE 10-9-86
 WITNESS: A. M. Harve
 H.P. PATRICIA B. YARRELL, C.S. 2619
 (2/9/2)

CNA Insurance
 Syracuse, New York
 Mr. Ted Estergard
 Mr. Roy Orr
 Mr. Alan Goldberg-Attorney

Report of Call at Syracuse:

Dr. C. S. Thompson and I discussed the Workmans Compensation hearing scheduled for November 17, 1976 dealing with former GTC worker Francis Boney.

Mr. Boney died in May 1976 while his compensation case was in progress. The diagnosis was death due to bronchogenic cancer. Prior to death, Mr. Boney was claiming complete disability due to talcosis. Mr. Boney's widow is now claiming that the cancer was a result of talcosis, brought on by exposure to talc, and CNA is faced with a sizeable claim that must be handled separately from the W. C. proceedings that were taking place before Mr. Boney's death.

In this type of case, unlike the W. C. cases of disability of living claimants, there is no settlement out of court. CNA either pays the stipulated sum to the widow or is freed from any responsibility, depending upon what the court rules was the cause of death.

CNA believes that if the W. C. court referee rules that death was caused by cancer which in turn was caused by talcosis, there will be a rash of similar claims from many other GTC workers. This may be especially the case since the Boney widow's lawyer is apparently making a career out of handling talc worker cases. He has handled some ITC worker cases, and is now adding the GTC workers to his list of clients.

Mr. Goldberg said that the Boney attorney had mentioned that Mr. Kitts would be at the hearing, and it is believed that Kitts also gave testimony at other hearings involving former ITC workers. Accordingly, CNA is quite anxious to counteract any Kitts testimony that asbestos might be involved in the Boney case. Otherwise, they believe they can expect many more similar claims from former GTC workers.

It was agreed that Mr. Harvey would attend the hearing scheduled for November 17th in Syracuse, for the purpose of observation and advising Mr. Goldberg in any way that might help counteract Kitts testimony. Mr. Goldberg will leave the hearing open until we have had a chance to study the transcript of the Kitts testimony with Dr. Thompson, then another date will be set for Dr. Thompson to present rebuttal as well as new testimony of his own. They felt that this procedure was as good as, or possibly better than having Dr. Thompson at the hearing on the same day as Kitts.

Handwritten: SA

We discussed at length the medical aspects of the case. CNA is now relying on a pathologist from Albany who may or may not know much about the talc-asbestos problem. We suggested that CNA contact Dr. Tabershaw for advice on this whole situation, and they seemed quite receptive. We would not be surprised if CNA brings him in on the case as a consultant.

In summary, CNA is mainly interested in disassociating talcosis from lung cancer and, by inference, exposure to New York State talcs from carcinogenicity. To do this they need to establish that little or no asbestos was normally found in the ores mined at the time Mr. Boney was working for GTC. This is where they need our assistance.

AMH:slb

5-B

Mr. G. F. Driver

155

IRVING R. TABERSHAW, M.D.
Consultant in Occupational Medicine
10215 Fernwood Road, Suite 302, Bethesda, Maryland 20034
Telephone: (301) 530-6992

SEP 30 1977

PLT/DEPT
EXHIBIT NO. 6
DATE 10-2-82
WITNESS
BY: [Signature]

September 27, 1977

Mr. Theodore G. Esterguard
Supervisor, Workmen's Compensation
Claims
Syracuse Branch Office
CNA Insurance
P. O. Box 1243
Syracuse, New York 13201

Re: 40-126992
R.T.Vanderbilt, Inc.
Francis Boney (deceased)

Dear Mr. Esterguard:

Dr. Lamm and I have reviewed the material you sent us. It shows the following:

1. Cancer diagnosis is not in question.
2. Cancer metastatic to adrenal glands as cause of death is not in question.
3. Remaining question is whether or not the worker's mining exposure may reasonably be responsible or partially responsible for his cancer.

To wit, if the worker had 17 years' exposure beginning 25 years ago at concentrations of 2-5 fibers/cc, that exposure is probably sufficient to be at least partially responsible, particularly in a man with more than 20 pack years of cigarette consumption.

If the concentration was < 1 fiber/cc, causation is increasingly doubtful, as risk appears to go down very markedly with drop in concentration. Likewise, latency appears to increase.

Furthermore, the responsible fiber exposure would be that of more than 10-15 years ago, not the recent product exposure.

Neither Dr. Lamm nor I will be available to testify. If you feel medical-epidemiologic testimony is necessary, consider either Dr. Keith Morgan of West Virginia University or Dr. Hans Weill of Tulane University.

Sincerely,

[Signature of Irving R. Tabershaw]

Irving R. Tabershaw, M.D.

cc: Allen Harvey

RECEIVED

OCT 3 1977

W, C, S & R

(20)

See pages 3 and 4 (27)

Presentation By The R. T. Vanderbilt Company, Inc.
To Assistant Secretary of Labor, Mr. John Stender,
Industrial Talc - June 19, 1975, Washington, D. C.

PLTFF/...
EXHIBIT NO. 10-986
DATE 10/2/75
WITNESS N.P. PATRICIA W. YARNELL CSW 2019
(10/2/75)

On behalf of the R. T. Vanderbilt Company I would like to thank Mr. Stender and the Occupational Safety and Health Administration for this opportunity to speak to this issue, namely, the possible withdrawal of Mr. Stender's letter to Mr. Vanderbilt of October 9, 1974 and the possible rescinding of OSHA Field Information Memorandum #74-92 on the subject of tremolite and talc.

Let me make it clear at the start that the Vanderbilt Company has suffered significant loss of talc business in the past year as a result of the promulgation of the OSHA Asbestos Standard. If Mr. Stender's letter is recalled and the Field Memorandum is rescinded we will stand to lose a major amount of business and it is extremely doubtful that the Vanderbilt Company will be able to remain in the talc business if this action is taken. I also want to make it clear that we honestly believe that if these documents to provide temporary relief from an inapplicable and defectively promulgated asbestos standard are allowed to stand, pending the conclusion of the NIOSH-MESA study of tremolitic talc, the health and safety of our workers and of the workers in the establishments where our talcs are used, will not be compromised.

We are strong in this belief. We have evidence and data to show that this belief is correct and we will stick with this position until we are shown reliable and conclusive evidence to the contrary.

The OSHA Asbestos Standard was promulgated in 1972 to regulate certain mineral products for which there was good and convincing evidence that a hazard existed for those workers exposed to dust containing these minerals. These minerals were chrysotile, crocidolite and amosite, which together constitute 99 percent of the minerals used as asbestos.

7-10

But without any documentation whatsoever, the minerals anthophyllite, tremolite and actinolite were also included in the list of materials to be regulated by this standard. This action, this oversight, let us say, this lack of recognition of the need for mineralogical expertise in a standard regulating minerals, has inadvertently, and certainly, we believe, unintentionally, set in motion a chain of events which has seriously jeopardized the economic future of our company.

Our competitors have seized upon the opportunity of using the government as an ally in their efforts to gain economic advantage over us. Our competitors are not small. They are Pfizer and Cyprus Industrial Minerals and Johns-Manville and Engelhard Minerals - all of them many times our size, and all members of the FORTUNE 500. Together with big government, we face the frightening prospect of huge companies allied in a fight against one small, family-owned talc producer.

The two basic types of talc sold in the United States are tremolitic and steatite or platy talc. OSHA has regulated tremolite without any documentation and has erroneously put it under the asbestos standard. OSHA does not put steatite talc under the asbestos standard thus giving the steatite producers a strong competitive advantage.

In practically all cases in which we have lost our talc business because of fear of the asbestos label and its consequent regulation requirements, we have lost to steatite talc, a substance that has not been proved any more or less hazardous than tremolitic talc. But neither the relative toxicity of the steatite talcs nor of the tremolitic talcs will be known until the completion of the official NIOSH-MESA study.

Our competitors have been quite busy since the asbestos standard was promulgated. In a series of ads in leading paint journals the Pfizer Minerals Company has advised paint companies to "Avoid Talc Problems posed by new Federal Regulations" and "If you use talc, and are not using the right talc, you may encounter a problem". By admission in one advertisement, the Pfizer copy reads "It was a lot cheaper and quicker for manufacturers

A-8

to switch to asbestos-free talc than to install the equipment necessary to reduce airborne concentration of hazardous fibers to admissable levels".

And we ask again, where is the documentation that proves steatite or platy talc less hazardous than tremolitic talc?

We even have the sorry spectacle of another of our competitors, again many times larger in overall business volume, advising customers to use their talc because it contains less tremolite, - trading on the relative ease of complying with the standard in comparison with the use of Vanderbilt's so-called asbestos containing talc.

But the most vicious attack of all has come from the largest asbestos company in the country - Johns-Manville.

Johns-Manville representatives approached us in early April of this year and asked to meet our company executives and technical personnel for the purpose of discussing the labeling of talcs with the Asbestos Warning Label.

A meeting was held in April and analytical data was presented by Johns-Manville on a series of Vanderbilt talcs they had secured on the open market. They admitted they had shown this same data to OSHA officials earlier in the year without notice to us, and they admitted that they had sought withdrawal of the OSHA Field Memorandum on the basis that it had resulted in unfair competition. An admission that was confirmed later in our discussion with various OSHA personnel in Washington. OSHA was apparently impressed with the Johns-Manville data and without confirming its accuracy let it be known that as a result of these findings Vanderbilt's credibility had been seriously damaged and a recommendation would be made to withdraw the OSHA Field Amendment.

The most damaging portion of the data presented was the alleged finding, among other mineral fibers of up to 35 percent chrysotile asbestos in all our talc products.

The data came as a surprise to us, partly because we had not detected chrysotile in any
that we were marketing

products containing materials which had been clearly demonstrated to be a hazard.

We knew well that our products contained tremolite and anthophyllite, and we were conditioned to the probability that Johns-Manville would use the out-dated and inadequate definition of a fiber to prove that the latter two minerals were present in the asbestos form. But the accusation of a significant content of chrysotile in our products was indeed frightening.

Johns-Manville had offered to supply us with portions of the talcs they analyzed for our own inspection, and we immediately accepted this offer. The samples, as received, were sent to two well known and accredited analytical laboratories E. M. Ventions, Rockville, Maryland, and McCrone Associates, Chicago, Illinois, for the express purpose of detecting the one ingredient, chrysotile, we had not found or suspected to exist in our talcs. We also sent off-the-shelf samples of our products in case there was any question about the handling of our talcs by Johns-Manville personnel.

The results of analysis by E. M. Ventions and McCrone; using every available technique of mineral inspection - scanning electron microscopy coupled with energy dispersive spectrometer, transmission electron microscopy, selected area diffraction, etc. are contained in the report we will leave on the table for the inspection of the technical people in this room.

The result - absence of any detectable chrysotile. And, we might add, Johns-Manville is the largest producer of chrysotile in North America and supposedly expert.

You see, Mr. Stender, what this small company is up against. And you might ask, what about the findings of the people at NIOSH Technical Headquarters in Cincinnati.

We are aware of the fact that NIOSH has been gathering samples of our talc products following the Johns-Manville visit to OSHA offices in Washington, and no doubt they have finished their analysis and have reams of data and pictures to show and distribute.

2-0

After listening to NIOSH testimony at the recent Borg-Warner Hearing in Ohio there is no doubt they will continue to maintain that Vanderbilt talcs are loaded with asbestos. According to NIOSH's interpretation of the criteria stipulated in the OSHA Field Memorandum they are certain to find asbestos fibers even by this set of standards.

And, of course, they could find fibers in any mineral product, especially if NIOSH is allowed to develop its own set of fiber definitions, which seem to be - "If a particle has a pathological response, it must be a fiber". This interpretation is, in our opinion, a subversion of both the Standard and the Field Memorandum.

Even the steatite producers hedge on the purity of their products by adding to their claim of asbestos-free talc the qualifying statement - "to the limits of x-ray diffraction and transmission electron microscopy".

As a matter of fact, the state of the art of analysis for asbestos is such that the Food and Drug Administration has withdrawn their proposal to prohibit the use of "asbestos-containing" talcs as food and drug ingredients, giving as their reasons the inadequacy of the available methodology to determine the amount of asbestos in talc, as well as a consideration of the controversial nature of evidence to demonstrate the hazard to health presented by ingestion of the amounts of asbestos fibers normally to be expected in the talcs used in food and drugs.

Using the criteria of the OSHA Field Amendment as they were meant to be used, and taking into consideration the state of the art of analysis and the impossibility of reaching zero asbestos or fiber in a naturally - occurring mineral product, we submit that our talc products are essentially free of true asbestos fiber forms of the minerals listed in the Federal Register.

The business of mining, dealing with mineral associations as they occur in nature, is concerned with variations in mineral content and variations in the forms of these minerals from batch to batch as different areas of an open pit or an underground stope are developed.

With these talc products we are processing a mixture of at least six or seven different minerals, and several of these minerals can appear in different forms, that is, the same mineral with the same chemical composition and crystal structure can occur in more than one form or shape.

In the case of the mineral talc, we have become aware, since we purchased the assets of the former International Talc Company in the vicinity of our Gouverneur properties, of the existence of two forms of the mineral talc, fibrous and non-fibrous.

The fibrous forms occur predominantly in the former International mines at the eastern - most section of the talc belt. Usually, the fibrous talc deposits are accompanied by fibrous or true anthophyllite asbestos.

We mine this material from a separate mine, we process it in a separate mill, and we label the bags with the official Asbestos Warning Label - and we have notified our customers of the need to comply with the OSHA Asbestos Standard when using the product. This labeling procedure took place soon after we resumed mining of this particular product and has been going on since the beginning of this year. We might add here, to those critics who cannot understand our reluctance to label our NYTAL grades, or to have our customers label our NYTAL asbestos-free products with the official Asbestos Warning, that this decision to label our fibrous grades has resulted in significant loss of business. One of our largest customers stopped using our product solely for the reason of the Asbestos Warning. In this case he had found a substitute material.

As in the asbestos-using industry only those customers with particular applications for which there were no ready or economic substitutes, have continued with the use of the fibrous grades and instituted compliance with the asbestos standard.

When our other grades of talc are mined, that is, the NYTAL or asbestos-free talcs, every effort is made at the time of mining, before the ore is crushed and processed, to examine the ores scientifically for the existence of asbestos fiber, and to separate any portions

7-4

of the crude ore that we determine have a fibrous content.

In our on-going evaluation of the finished ground product we have found from time to time the existence of fibers that escaped our examination of the crude ore. An extensive research program is in progress to eliminate by processing techniques any fibers that do escape our original inspection.

We have stressed the need to determine scientifically and positively the relative hazards involved in the use of industrial talcs. NIOSH has recognized this need and has instituted the joint NIOSH-MESA study, which we believe has already begun in Vermont. We wholeheartedly support the NIOSH program and have agreed to a thorough inspection of our facilities, to open up our medical records to the NIOSH investigators, and to cooperate in the investigation as confirmed in our letter to Dr. Jon May, dated March 20, 1975. We hope that NIOSH will not pre-judge the issues to be studied. All we ask is that we are not hanged before we are found guilty.

Until this study is concluded we respectfully request for our customers, relief from intimidation by OSHA personnel and the opportunity to control harassment by our competitors. It is our belief, as stated earlier, that interpretation of the asbestos standard as set forth in Field Memorandum #74-92 will not affect adversely the health and safety of workers exposed to the dust of our products.

We are not alone in this belief. The Bureau of Mines in its amendment of the asbestos regulations for Metal and Non-metallic mines, as published in July 1, 1974 issue of the Federal Register sought to clarify the definition of asbestos and to deal with industrial talcs containing tremolite. Following the May 8, 1975 public symposium on talc the Bureau of Mines concluded that "Medical data based on both human and animal studies supported the opinion that talc and talc with tremolite are not as hazardous as chrysotile or other true asbestos minerals". The Bureau of Mines further indicated its willingness to await the results of the planned joint study by NIOSH and MESA to determine the toxic nature of talc and tremolite dust exposure before setting new asbestos regulations. The Bureau of

26

Mines further stated in its Federal Register publication that "tremolite of non-asbestiform which occurs in talc deposits is not mentioned in its definition of asbestos and therefore is not covered".

Furthermore, the Environmental Protection Agency, recognizing the differences between asbestos and industrial talc, and acknowledging the need for standards that can be uniformly interpreted by industry personnel and enforced by the Agency, clarified and revised their National Emission Standard for Hazardous Pollutants by publishing in the May 3, 1974 issue of the Federal Register a rule on the applicability of the asbestos standard to manufacturing operations using industrial talc. The EPA regulations make it clear that operations that use talc are not covered by the asbestos standard.

Dr. W. E. Smith, present here today, has published the results of his animal studies to determine the effect of various types of asbestos and tremolitic talc when injected intrapleurally into hamsters. Dr. Smith discovered profound differences in biologic effects in respect to both fibrogenicity and carcinogenicity, between tremolitic talc and the true asbestos minerals.

The report of Dr. G. W. Schepers given at the Bureau of Mines Talc Symposium of May 8, 1974 also establishes the lack of carcinogenicity of the mineral tremolite found in New York State Talcs. Dr. Schepers rates the pathogenicity of tremolite in the same category as talc and clay.

Dr. Morris Kleinfeld, formerly of the New York State Department of Labor, Division of Industrial Hygiene published his report of an epidemiological study of 39 workers whose total work history in the Vanderbilt mine and mill ranged from 11 to 22 years. His finding of no evidence of lung cancer in these workers led him to recommend "that the present threshold limit value for tremolite and anthophyllite needs reevaluation".

We could go on to other publications that would indicate the relative lack of hazard associated with tremolitic talc exposure - sufficient evidence to show that considerable

74

controversy surrounds this particular area of medical study.

In view of the data we have presented regarding the total lack of documented hazard involving the minerals under consideration, we request the following:

1. The NIOSH-MESA study of all industrial talcs be completed.
2. Your letter of October 9, 1974 permitting certification of our talcs be continued pending the completion of the NIOSH-MESA study.
3. The reasonable and scientifically acceptable description of a mineral fiber, as stated in the OSHA Field Memorandum #74-92 be continued.
4. When the NIOSH study is completed and conclusions drawn, an appropriate standard regulating all industrial talcs be established.

If OSHA and NIOSH continue on the present course which they have indicated to us there won't be a tremolitic talc industry to investigate. We will have closed our doors before the investigators arrived - and a valuable economic commodity will have been eliminated from the American market place.

7-1

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In view of the data we have presented regarding the total lack of documented hazard involving the minerals under consideration, we request the following:

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If OSHA and NIOSH continue on the present course which they have indicated to us there won't be a tremolitic talc industry to investigate. We will have closed our doors before the investigators arrived - and a valuable economic commodity will have been eliminated from the American market place.

27



DATE: February 1, 1983

EXHIBIT NO. 8
 DATE 10-2-86
 WITH THE SIGNATURE OF N.P. PATRICIA W. YARNELL, CSR 2018

SECTION I	
TRADE NAME AND SYNONYMS	IT X, IT 3X, IT 5X, IT FT, IT 325, Industrial
MINERAL FAMILY	Hydrous Silicates
CHEMICAL COMPOSITION	Complex hydrous calcium magnesium silicates

MINERAL	SECTION II INGREDIENTS	CAS NUMBER	RANGE %
Talc (Hydrated magnesium silicate)		14807-96-6	20-40
Talc (fibrous) -(CONTAINS NO ASBESTOS)		14807-96-6	1-5
Tremolite nonasbestiform		14567-73-8	30-50
Anthophyllite nonasbestiform		17068-78-9	5-10
Serpentine (antigorite - lizardite)		12135-86-3	20-30
Quartz		1480-60-7	0-2

SECTION III PHYSICAL DATA			
COLOR	White	DENSITY, Mg/m ³	± 2.8
APPEARANCE	Powder		
OTHER PROPERTIES			

MINERAL	SECTION IV HEALTH HAZARD DATA	TWA*
Talc (hydrated magnesium silicate)		20 mppcf
Talc (fibrous) (containing no asbestos)		20 mppcf
Tremolite nonasbestiform		20 mppcf
Anthophyllite nonasbestiform		20 mppcf
Serpentine (antigorite - lizardite)		50 mppcf
Quartz (total dust)	30 mg/m ³ ± % Quartz	+ 2

*Time Weighted Average limit for any 8-hour work shift of a 40-hour work week, (Z-3 Table of Mineral Dusts, OSHA Standard for Air Contaminants, 29 CFR 1910.1000) based on 1968 ACGIH Table of Mineral Dusts, as officially adopted by OSHA.

SECTION V SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Do not breathe dust. Prolonged inhalation of excessive dust may cause lung injury.

8

DEPOSITION SUMMARYSchwartz v. Union Carbide

Deposition of Alan Morgan Harvey

Volume 1, Pages 1 through 227

Taken October 9, 1986

<u>Page</u>	<u>Lines</u>	<u>Description</u>
6	3-7	Mr. Harvey has had his deposition taken about 5 times. The last time being about 5 months ago.
7	18	Mr. Harvey has reviewed the interrogatory answers by Vanderbilt to the plaintiff and medical records before the deposition.
8	15-18	He received a Bachelor of Science in 1945 from the University of Guelph. Then he received a Master of Sciences and Biochemistry from Michigan State University in 1947.
9	5-15	He went to work for the food machinery and chemical corporation as a research chemist in 1947 preparing new research chemicals in a laboratory. He worked that job until 1951.
10	25	In 1951 he began working for the R.T. Vanderbilt Company in the Cells Development office. He developed the cells of various biocides for 4 years.
12	10-24	Dr. Kenneth Karsten the manager of the Biocide Lab was Alan Harvey's supervisor from 1951 to 1955.
13	3-4	In 1955 he became a chemist for the Vanderbilt Corporation. From 1955 to 1971 Dr. Lester Brooks, the Lab Director was his Manager.
	17-18	In 1971 he became Manager of the Talc Department at R.T. Vanderbilt.
14	5-9	He prepared all the necessary data and paperwork in order to pass along patents to patent attorneys for around 8 years.
	21	Vanderbilt was trying to obtain chemical patents.
51	11-13	Vanderbilt does not have patents on their talc because they are not patentable.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
16	1-6	Mr. Harvey's supervisors were Dr. K. Karsten and Mr. Robert Bacon.
17	10-15	Around 1972 his duties began changing. He was involved in collecting data and information concerning government rules and regulations that might affect the sale and production of various chemicals and minerals.
	23-25	Vanderbilt has 3 different divisions with different managers. They were divisions of manufacturing and mining, a research division, and various sales divisions.
19	1-2	Mr. Harvey would disseminate information to the following people beginning in 1972; Mr. Ross, Mr. Carlson, Mr. Clark, Mr. Johnson, Mr. Markey, Mr. Lawrence and Mr. Cozlid.
20	19	In 1972 Mr. Maclellan was the head of the manufacturing and mining.
21	18-25	Later in time Mr. Harvey began preparing material data safety sheets and disseminated them within and outside of the office.
22	24	He eventually became Director of Environmental Affairs.
23	8-10	His department was one of the places of the company where one would go in order to find information concerning Vanderbilt products. He collected primarily regulatory information.
24	7	Mr. Harvey has had no formal training in environmental safety.
	17-21	Mr. Harvey has had experience in that field by just carrying out his normal duties.
25	10	In 1981 Mr. Harvey came up with the title of Director of Environmental Affairs.
	21	For the last year he reported to the Chief Executive Officer who was Gus Fiederlein.
26	9	Before that he reported to Thomas Noland who is now retired.
27	3	There is a main corporate headquarters in Norwalk, Connecticut.
	14-15	Mr. Harvey gets most of his information from the Federal Register.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
28	1-3	He also receives regulatory information from sources such as the American Mining Congress and the National Paint and Coding Associations or other trade organizations.
	21	It was his duty to attend meetings of various trade organizations regularly.
29	24-25	Mr. Harvey has never been in an executive position for the National Paint and Coding Association.
30	23	He has been Vanderbilt's representative at that association for 12 years.
31	12-16	Mr. Ross and Mr. Karsten also attend meetings of the National Paint and Coding Association.
32	13-15	The health committee of the National Paint and Coding Association meets every 2 months.
	20-24	The purpose of the National Paint and Coding Association is to help members in their day to day conducting of business.
33	5-7	The health committee helps members on matters regarding health. For example, new health standards promulgated by a Government agency.
34	14-15	The Occupational Safety and Health Administration and the Consumer Product Safety Commission would make label requirements.
35	1-2	Labels usually contain words of caution.
	21-24	The National Paint and Coding Association devised a labeling system whereby various chemicals that would be used by the paint industry could all be labeled in the same manner.
36	11-12	This systems' criteria involved the vectorial layout the size of letters colors and numbers.
	15-19	This committee was not responsible for the actual wording of the label.
38	6-12	Different members that were on that committee were Mr. Keller from PPG, Mr. Johnson from Dupont, Mr. Smith from Pratt-Lambert and Mr. Gangush from the Sherwyn Williams Company.
41	2	Mr. Steve Sides is the Secretary of the committee. He works at the National Paint and Coding Association.
42	5-21	Mr. Harvey does keep a file of some of the Minutes that he has received from the meetings. Both he

<u>Page</u>	<u>Lines</u>	<u>Description</u>
		and his secretary plus Paul Vanderbilt and John Kelsy the corporate industrial hygienist have access to the file.
45	8-11	Mr. Harvey does not know what conformal coding process is.
	17	The talc product was the only product at Vanderbilt that were discussed at that committee.
46	8	Industrial talc is Vanderbilt's product and different talc products contain different composition.
	25	The 2 talcs are different because 1 is mined in Canada and the other in Gouverneur, New York.
47	3-6	Talcs that come out of the same area have more or less the same composition.
	20	Nytol is a name of a line of talcs.
48	12	The paint industry bought only 1 line of talc. It was the nytol line and the IT line which were all in the same sort of grouping.
	20-21	The talc in paint improves the durability of the coating.
50	9-18	About 12 years ago, Dr. Thompson, a mineralogist for the R.T. Vanderbilt Company came and spoke to the health committee on talc and its composition.
51	20	Mr. Harvey does not know the circumstances which occasioned Dr. Thompson to coming and talking with the committee.
52	6	Mr. Harvey has had discussions with others on the health committee regarding any health hazards associated with Vanderbilt talc products.
	9-12	He cannot remember who these conversations were with or when he engaged in them.
53	20	Mr. Harvey cannot remember if anyone on the health committee ever expressed a concern regarding health hazards in the talc product.
55	11-19	In the last couple of weeks Mr. Harvey has had conversations with Conrad Reiger who is a ceramics engineers with R.T. Vanderbilt, regarding health hazards that are associated or alleged to be associated with talc products.
	23	Mr. Reiger is not an expert in the area of occupational health.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
56	1-9	The discussion revolved around the fact that there was a lack of health problems associated with exposure to the Vanderbilt talcs. Both Harvey and Reiger were expressing the fact that there was a lack of a health problem.
	11-20	Mr. Harvey was basing his statement on a study conducted by Dr. Steven Lamm of the health study of the Vanderbilt talc workers which was conducted in approximately 1981.
	22-25	Dr. Lamm is a M.D. in occupational health.
57		Mr. Harvey has known Dr. Lamm for approximately 10 years. Dr. Lamm has his own research consulting firm.
	23	Dr. Irving Tabershaw and Dr. Lamm were associated together on a study commissioned by Vanderbilt that began in 1981.
58	5-8	The executive staff would make the decision to commission the study.
	11-14	The executive staff consisted of Mr. H. B. Vanderbilt, Sr., Mr. Fiederlein, Mr. Niehaus, Mr. Gorman, Director of Sales, and Mr. Short, Director of the Laboratory.
59	4	Mr. H.B. Vanderbilt Jr., is in charge of mining and manufacturing.
	14-15	Mr. Vanderbilt was responsible for production of talc as overall Vice President in charge of mining.
	18	Directly under him would be George Erdman.
60	13	Mr. Harvey did participate in the decision to commission the study in 1981. He was mostly an advisor of whether the study should be done or not.
	20-25	Mr. Harvey advised that the study be done because he wanted to supplement the study done by Dr. Tabershaw which came up with roughly the same conclusion.
61	13-14	Mr. Harvey has reviewed the 1981 study in its final form.
62	6-7	Mr. Harvey wanted to supplement the study done by Dr. Tabershaw because Dr. Tabershaw concentrated his health study on the workers of the Gouverneur Talc Company.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
	12-16	Mr. Harvey suggested that Dr. Lamm supplement that study by comparing those results with the results of the NIOSH study of talc workers in Vermont which was done around 1978.
63	4-9	Dr. Tabershaw's studies dealt with talc miners in New York while the NIOSH study dealt with talc miners in Vermont.
64	8	Mr. Harvey believes that Dr. Tabershaw did not do more than one study regarding talc miners in general.
	17	Mr. Harvey is not aware of any other studies done by Dr. Tabershaw regarding health hazards associated with exposure to talc.
	23	The only one that Mr. Harvey is aware of is the study found in the journal of occupational medicine study commissioned in approximately 1975.
65	6	Dr. Lamm's name does not appear on the study. The co-author is Stille.
66	6-9	The results of the Vermont Study was that the amount of non-malignant respiratory disease was in excess of that expected.
	12	The study included both malignant and non malignant respiratory diseases.
	17-19	The Vermont Study told that exposure to talcs were associated with an increase rate of lung cancer.
67	1-5	Mr. Harvey says that talc is supposed to be contributory or a factor. Although there was an increase in lung cancer found amongst workers of the mine it could not be attributed to exposures to the talc dust at the mine.
	18	Mr. Harvey says that NIOSH attributed their cancer to an unknown etiology.
68		Dr. Boundy was the head doctor on the NIOSH study.
	12-13	This was an epidemiology study which included both morbidity and mortality.
	19-20	Mr. Harvey obtained a copy of the study from a book entitled <u>Dusts and Diseases</u> .
69	15-16	He found out about this book when he attended a conference about 15 years ago in Washington in which all the papers that were given were printed in that book.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
	22-23	The conference was sponsored by the Society for Occupational and Environmental Health.
70	6	Vanderbilt is not a member of the Society for the Occupational Environmental Health.
70	25	Mr. Harvey obtained a preliminary agenda and different matters on it were of interest to Mr. Harvey including matters of health and matters of dust.
71	21	Talc was to be discussed at the conference.
72	1	Dr. C.S. Thompson also attended the conference.
	8-10	Dr. Thompson is a mineralogist and is manager of the Mineral Department - Research.
73	2-5	Some of the speakers at the conference included Dr. W.E. Smith and he spoke on animal studies having to do with exposure to talc dusts.
	8	Dr. Smith was commissioned by Vanderbilt to do animal studies around 1976.
	18-21	Mr. Harvey made the decision to commission Dr. Smith to do the study because he wanted him to determine the effects of exposure to these animals of the particular talc ingredient.
76	14-15	In 1976 Mr. Harvey says that they were always concerned with health hazards of exposure to any other chemicals or dust.
	20-24	The occasion beginning the concern was the commencing of the National Institute of Occupational Safety and Health Team and their health study of Vanderbilt miners of Gouverneur which began in 1975.
75	8	The NIOSH study was an epidemiology study studying the health of the workers.
	23-25	Mr. Harvey recalls the Smith Study involving the injection of the main ingredients in the talc into the intrapleurol spaces of golden hamsters.
76	2	The main ingredients was trimolite in 2 different concentrations.
	16-25	Mr. Harvey decided to do the study of hamsters because he was aware that Dr. Smith was working in this area and had worked with various studies of animals. Mr. Harvey felt that they could get some results that would tell them something about the

<u>Page</u>	<u>Lines</u>	<u>Description</u>
		health hazard if there was one involving exposure to the talc.
77	4	In 1975 Mr. Harvey did not have any doubts about whether there was a health hazard associated to the talc.
	9-10	So the reason he commissioned study, was so he could satisfy any further questions that came up.
78	17	Mr. Harvey believed that his product was safe.
79	13	Dr. Harvey does not know why NIOSH had started to do a study on his talc products.
	17	The Smith study was the first study ever commissioned by Vanderbilt regarding possible health hazards associated with talc products.
80	1-5	Mr. Harvey met Dr. Smith personally about 1973.
	20-22	Mr. Harvey went to Dr. Smith's office because he wanted to discuss the study with him.
81	9-10	Mr. Irving, the manager of the Gouverneur facility is in charge of the safety of the miners at Vanderbilt.
82	10	Mr. Harvey does not remember whether or not anyone at Vanderbilt had the responsibility of keeping abreast with medical literature regarding the exposure to talc.
	16-19	Mr. John Kelse has been employed as an industrial hygienist for the last 2 years.
83	10-11	Before Mr. Kelse, R.T. Vanderbilt did not have any industrial hygienist except for the one that Hartford Insurance Company sent to them.
	25	The name of that hygienist that Hartford sent was John Kelse.
84	3	Mr. Kelse is now a full time employee for Vanderbilt.
	10	Before beginning work for Vanderbilt John Kelse did surveys for Hartford since about 1980.
	21-25	Vanderbilt regularly did medical examinations of its talc employees since 1948.
85	10-11	Today Mr. Kelse is responsible for overseeing the medical program.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
	24	To find out if records existed of medical examinations he would have to go see George Erdman.
86	5	Mr. Kelse would have records regarding medical studies done on the workers.
	16	Mr. Harvey would be the one to go see if he wanted to find medical studies done on talc workers.
	20	Mr. Kelse, Mr. Paul Vanderbilt and Mr. Reiger would also have copies of medical studies done on the talc workers.
87	7	Mr. Harvey recalls discussing the commissioning of the Smith Study with Dr. Thompson.
	15-16	They discussed the ease of isolating the trimolite and the talc that they were making.
88	17	Mr. Harvey does not remember if anybody else participated in making the decision to commission the Smith Study.
89	20	Mr. Harvey does not remember if he had a phone conversation with Dr. Thompson prior to meeting him in his office.
90	17	Mr. Harvey does not know how much Vanderbilt paid Dr. Smith to do the study.
91	5	Mr. Harvey personally had discussions with Dr. Smith regarding how much the fee would be for doing the study.
	14	Mr. Harvey has no recollection of how much the amount was.
	17-20	Mr. Harvey cannot remember what he told Dr. Smith but he did go to the meeting with a notion in his mind of what type of study he wanted conducted.
	25	Mr. Harvey wanted a study that would inject trimolite into the intrapleural spaces of hamsters.
92	22	Part of the focus of the study was to determine whether there was a risk of cancer.
93	2-3	The conclusion was that there was no risk of cancer from the material injected into the hamsters.
95	16	The earlier study done by Dr. Smith was in about 1959. He used talc from the mines in Gouverneur New York, which was owned by another company before R.T. Vanderbilt.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
96		In 1975 another study was commissioned by Vanderbilt regarding exposure to talc products.
97	24	Dr. Tabershaw was commissioned for the second study.
98	20	Mr. Harvey has last spoke to Dr. Tabershaw about 3-5 years ago.
99	9-12	In about 1975 Mr. Harvey contacted Dr. Tabershaw for the express purpose of having him run an epidemiology health study of the workers of the Vanderbilt company's Gouverneur mine.
	23	Mr. Harvey had determined what type of study he wanted to conduct prior to contacting Dr. Tabershaw.
100	6-9	He arrived at this determination because a person in the NIOSH organization about what kind of studies they had planned for Gouverneur Talc Company operations. Therefore, he knew what kind of study that Dr. Tabershaw would do.
	20	In approximately 1975 was the first time Mr. Harvey learned that NIOSH wanted to do a study of the talc miners.
	23	Someone from NIOSH approached someone at Vanderbilt.
101	5-12	Dr. Jon May from NIOSH asked if Vanderbilt company would agree to an epidemiology study of talc workers at the Gouverneur operation.
	14-15	Mr. Harvey brought the question to the executive management because he couldn't make a decision like that on his own.
102	1	No one at Vanderbilt objected to the study being done.
	8	When the study began Mr. Harvey was the liaison between NIOSH and the company.
	15	The study was conducted from 1975 until 1980.
	23	Mr. Harvey does not recall any reasons that Jon gave him concerning why NIOSH wanted to conduct the study.
103	5-9	The reason that the Tabershaw Study was commissioned was because they were not familiar with the people at NIOSH and were not sure if they would do an accurate job. The only way to be sure was to have their own study.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
	16-18	Mr. Harvey believed that at the time that NIOSH would hire people to do a study that weren't qualified because at that time Mr. Harvey says they were informed of a similar study run by the same group on the miners of the Homestake gold mine in Lead, South Dakota.
	24-25	The findings were in concern to Mr. Harvey because the main allegation was that ores contained asbestos which they do not.
104	7-9	Mr. Harvey got this information from his mineralogist which information he got from mineralogical literature is what Mr. Harvey bases his opinion on.
	21	That study was conducted by NIOSH on the mine owned by Homestake Mining Company.
	23	NIOSH alleged they found asbestos.
105	4-9	Mr. Harvey heard about a Joseph Wagner in about 1975 because he was in the NIOSH organization and he was one of the researchers on the Homestake mine.
	25	Mr. Harvey does not know whether he knew if Dr. Wagner was going to be one of the researchers on the NIOSH study of Vanderbilt's talc mines.
106	6-9	Mr. Harvey has heard of John Dement. The first time he heard of him was around 1975.
	21-25	The first time Harvey heard of a Dr. Brown was between 1975 and 1980.
107	4-7	Mr. Harvey knew that Dr. Brown worked for NIOSH and was associated with epidemiology.
	18	The first time that Mr. Harvey heard about Ralph Zinwald was in 1975. Mr. Harvey knew that he had worked for NIOSH.
	25	Mr. Harvey knows who John F. Gambell is.
108	8-9	Mr. Harvey knew that Mr. Gambell was an industrial hygienist and an epidemiologist.
	14	Mr. Harvey never knew a William Felner but knew his name from some NIOSH documents.
109	20-21	Mr. Harvey was concerned with the NIOSH organization in general. . . not the individuals.
	24-25	Mr. Harvey believes that NIOSH is the research arm for the Occupational Safety and Health Committee.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
110	20	Mr. Harvey had no reason to doubt the qualifications of the people who were commissioned for the Tabershaw Study.
111	16	Another reason why the Tabershaw Study was commissioned was the fact that Mr. Harvey liked to know exactly what the health situation would be.
	21	Mr. Harvey remembers this deposition taken from the <u>Ditlinger</u> case in 1985.
113	4	Mr. Harvey felt there was no adequate data on this unique product.
	7	Mr. Harvey has heard of Dr. Kleinfield.
	16	He is also aware that Dr. Kleinfield was the author of at least 8 epidemiology studies regarding the health hazards associated with exposure to talc.
114	19	Mr. Harvey is aware of the 2 studies, one done in 1967 and one done in 1974 regarding his mines.
115	2-3	Mr. Harvey's understanding of the 2 studies were that they were studies of the International Talc Company operation which were not his mines.
	6	One of those mines is his today and was purchased in 1974.
116	7-13	Mr. Harvey is aware of a 1973 paper done by Dr. Kleinfield in which they alleged that there was asbestos form trimolite in one of his mines.
	25	Mr. Harvey is not aware of the study published in 1973 by Bliger and Pharm dealing with the relationship between industrial talc exposure and G.I. cancer.
117	6	Never has Mr. Harvey heard from any source of exposure to talc causing G.I. cancer.
118	5	Mr. Harvey is aware of a study done in 1942 by a Dr. Siegel although he is unsure of what the study did.
119	8	Mr. Harvey is not aware of Kleinfield's 1955 study which documented one death caused by mesophilioma.
	13-18	Mr. Harvey remembers Kleinfield's 1974 study entitled <u>Mortality Experience Among Talc Workers, A Follow-Up Study.</u>

<u>Page</u>	<u>Lines</u>	<u>Description</u>
	19-21	Mr. Harvey does not remember the conclusion of that study but he does know that the studies were not done at his mines.
	23	They were done at the International Talc Company mines.
120	24-25	Mr. Harvey does not remember if he met or heard of a Dr. Tabershaw before he was commissioned to do a study.
121	8	Mr. Harvey does not know how much Vanderbilt paid Dr. Tabershaw.
	17	He saw drafts of the Tabershaw study prior to its completion.
	20-21	Dr. Tabershaw or someone from this firm submitted drafts to him because it is common practice in an epidemiology study.
122	1-3	To submit your draft to the people for the company you are studying to see if there are any inaccuracies.
	12-16	Sometimes people make corrections on the drafts but the people doing the studies do not have to accept the corrections.
123	8	He does not recall making any such corrections on the Tabershaw study.
129	24-25	Mr. Harvey cannot remember seeing a document entitled "Review of Occupational Morbidity and Mortality of the Gouverneur Talc Company Draft".
131		Mr. Harvey has seen the plaintiffs' Exhibit 3 review of occupation morbidity and mortality of the Gouverneur Talc Company.
132	23-24	The Tabershaw Study is in the journal of occupational medicine and that is the finished document that he remembers.
133	5-6	Mr. Harvey's understanding of the Tabershaw Study is that in general any increased incident of lung cancer found cannot be attributed to or associated with exposure to talc dust of the Gouverneur Talc Company.
	19	Mr. Harvey believes that part of the Tabershaw Study was a critique of the NIOSH study.
134	4-6	The Tabershaw Study did not go out and collect new data. They collected the same information as NIOSH collected.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
	14-21	The Vanderbilt Company supplied all the mortality data and NIOSH collected their own industrial hygiene data.
135	9-12	For the mortality study Vanderbilt opened up their records.
	17-21	NIOSH did their own morbidity study.
136	3-4	The Tabershaw group was supplied some data from the Mine Safety and Health Administration who were doing an industrial hygiene survey at the same time.
137	5-7	Tabershaw collected their own morbidity data.
	13-15	The mortality study involved collecting data already in the files.
139	7	Mr. Harvey agrees that with the critiques of the mortality study made by Tabershaw but NIOSH made some assumptions based upon individual employees who had worked for a very short period of time at the mines.
	21-23	Mr. Harvey says that one of the salient features of NIOSH's report was wrong long term exposure. It says the longer you work for Vanderbilt the more likely you are to get lung cancer.
140	1-6	Mr. Harvey says that in their cohort NIOSH used a man who had never been exposed to Vanderbilt dust.
	25	Mr. Harvey says that Mr. Dement from NIOSH used everyone on their payroll in their studies.
141	17-18	Sometime before 1980.
142	1-3	Mr. Dement told Mr. Harvey that they had a protocol and the protocol says that everybody that ever worked at Vanderbilt was going to be used in the study.
143	7-13	Mr. Harvey says that no one came to the conclusion, based on this study, aside from anybody from NIOSH, that short periods of exposure to Vanderbilt's talc could cause cancer.
	15-16	Mr. Harvey says that the 1980 document was criticized by every epidemiological scientist in the United States.
144	1-3	Mr. Harvey contacted Dr. Clark Cooper to critique the NIOSH document in around 1982 or 1983.

<u>Page</u>	<u>Lines</u>	<u>Description</u>
144	5-7	Mr. Harvey contacted Dr. George Wright in or around 1982 to 1983 to ask him to critique the NIOSH document.
	14-16	Mr. Harvey contacted Dr. Keith Morgan because he had already critiqued it. He was given the documents from OSHA.
145	4	Mr. Harvey says he has never retained Dr. Morgan in any other capacity.
	10-15	The Lamm Study conducted by Dr. Steven Lamm was the other study besides the Smith Study and the Tabershaw Study that Vanderbilt commissioned.
146	6-9	Mr. Harvey says that Robert Murray is an occupational health specialist who lives in England.
	12-13	Mr. Harvey contacted him about 6 or 7 years ago to critique the NIOSH document.
148		Mr. Harvey remembers the plaintiffs' Exhibit 4 document receiving a letter on December 18, 1980 from Dr. Murray.
	4-6	It was Mr. Harvey's understanding that Dr. Tabershaw was going to contact Robert Murray.
	15	Mr. Harvey has spoken to Dr. Murray.
150	7-8	Dr. Murray was asked to review both the NIOSH and the TOMA Report.
	15	Mr. Harvey has personal knowledge of Dr. Murray receiving both reports to critique.
151	24	Another critique that Vanderbilt solicited was the James Dunn Report.
152	5-8	Dr. Dunn critiqued the Industrial Hygiene portion of the NIOSH document. This was commissioned approximately 4 years ago.
	25	Dr. Tabershaw has been retained by Vanderbilt to act as their medical consultant.
153	8-9	Prior to his retirement Vanderbilt retained his firm TOMA (Tabershaw Occupational Medicine Associates) as their consultant.
154	3	Vanderbilt has used Tabershaw in a personal capacity as a medical consultant at least twice.
	6-7	The first time Dr. Tabershaw was used was in 1975 when Mr. Harvey first sat down with NIOSH people in West Virginia and discussed the protocol of the

<u>Page</u>	<u>Lines</u>	<u>Description</u>
		NIOSH study to be taken at the Gouverneur Talc Company.
	23	Dr. Tabershaw had initially been brought in to consult for that particular meeting.
155	6-10	The second time Dr. Tabershaw was used by Vanderbilt was when they went back to talk to the NIOSH people in Cincinnati about the study after it was published in 1982. Dr. Tabershaw went along with Mr. Reiger and Mr. Harvey to discuss with Mr. Brown the study that had been published.
	12-16	The purpose of that trip was to suggest to the NIOSH people to see if they could get them interested in having a review panel for the NIOSH study.
156	2-11	Tabershaw & Associates has worked for Vanderbilt many different times. They did some surveys of chemical manufacturing operations in Murray, Texas and Bethel Connecticut.
	6-17	Tabershaw & Associates ended up running a medical program for Vanderbilt prior to Hartfords Industrial Hygiene Program.
157		In around 1977 - 1978 Tabershaw & Associates started with the hands on type of work on their health studies as part of the epidemiology study.
158	8-10	Next year the same data was collected and goes into records which is part of the overall Vanderbilt program they have had since 1948 to look after the safety and health of the workers.
	18	There are records kept on each individual employee.
159	1	Mr. Harvey does not remember the doctor's name.
	9	The records are kept at the doctor's office.
	18-21	Vanderbilt had a written contract with Tabershaw & Associates from about 1978 until 1982.
161	1-3	The substance of the contract was that TOMA was to conduct an annual health program for the Vanderbilt Corporation.
	10-15	According to Mr. Harvey's knowledge Dr. Tabershaw has never been retained as an expert for purposes of litigation or has never testified on behalf of Vanderbilt.