COST $_____
PAID BY PLF. DEF.
TBA No._____

IN THE UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF TEXAS

AUSTIN DIVISION

VERNON SCOTT AND BUFORD SCOTT	I	
VS.	I	CIVIL ACTION NO.
JOHNS-MANVILLE SALES CORPORATION , OWENS-CORNING FIBERGLAS CORPORATION AND PITTSBURGH CORNING CORPORATION	I	A-81-CA-531

COPY

DEPOSITION OF:

JAMES HENRY RAPP

A05564

WORLDWIDE COURT REPORTERS, INC.

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PLAINTIFF'S EXHIBIT

UC-469

PLAINTIFF'S EXHIBIT

UC-4695

DEPOSITION AND ANSWERS of JAMES HENRY RAPP, called as a witness by the Plaintiffs, taken before Linda C. Baker, Certified Shorthand Reporter in and for the State of Texas, taken at the offices of Union Carbide Corporation, Texas City, Texas, on the 22nd day of June, 1982, beginning at 1:15 p.m., pursuant to Notice and Subpoena issued herein, and the following agreement, stipulation, and waiver of Counsel.

A P P E A R A N C E S

Mr. James R. (Ron) Weddington, of the law firm of Messrs. Friedman, Weddington, Hansen & Fisher, 812 San Antonio, Suite 515, Austin, Texas 78701, appearing for the Plaintiffs.

A0530

Mr. David M. Kendall, of the law firm of Messrs. Thompson & Knight, Two Wahrenberger House, 208 West Fourteenth Street, Austin, Texas 78701, appearing for the Defendant Johns-Manville Sales Corporation.

Mr. Lee C. Clyburn, of the law firm of Messrs. Fulbright & Jaworski, American Bank Tower, Suite 1740, 221 West Sixth Street, Austin, Texas 78701, appearing for the Defendant Owens-Corning Fiberglas Corporation.

Mr. Walter H. Mizell, of the law firm of Messrs. Brown, Maroney, Rose, Baker & Barber, 1300 American Bank Tower, Austin, Texas 78701, appearing for the Defendant Pittsburgh Corning Corporation.

Mr. C. C. Gillespie, III, of the law firm of Messrs. Flahive & Ogden, 505 West Twelfth Street, Austin, Texas 78701, appearing for the Intervenor, American Motorists Insurance Company.

A0530

Also Present: Mr. Joe Sula (During some portions of deposition)

S T I P U L A T I O N

IT IS STIPULATED and agreed by and between Counsel for the respective parties hereto that the deposition of the witness named in the caption hereto may be taken at this time and place before the officer named in the caption hereto, pursuant to Notice and Subpoena issued herein; and that said deposition, or any part thereof, when so taken may be used on the trial of this case with the same force and effect as if the witness were present in court and testifying in person;

THAT the necessity for preserving objections at the time of taking is waived, and that any and all legal objections to this deposition, or any part thereof, may be urged at the time same is sought to be offered in evidence on the trial of this cause; except, however, that objections to the form of the questions must be made at the time of taking, or else such objections are specifically waived;

THAT the original of this deposition shall be made available to the witness for examination and signing before any Notary Public, and thereafter said witness shall return same to the officer taking this deposition for filing with the Court.

* * * * * * * * *

PROCEEDINGS

JAMES HENRY RAPP,

was called as a witness and, after having first been duly sworn, testified as follows:

EXAMINATION

BY MR. WEDDINGTON:

Q. Would you state your name for our record, please?

A. James Henry Rapp.

Q. And you understand, Mr. Rapp, that you have been called here under subpoena to testify by deposition in a case entitled Vernon Scott versus Johns-Manville, et al, which is now pending in the Austin District Federal Court, and that this testimony can be used at the time of trial, and it's under oath just as if you were in a court. Do you understand all that?

A. I understand.

Q. All right. Now are you presently employed, sir?

A. I'm supervisor of the maintenance

insulators here at Carbide.

Q. Okay. At Union Carbide?

A. Right.

Q. And we are taking this deposition here in one of the offices of the Union Carbide Chemical Company in Texas City. Is that correct?

A. That's correct.

Q. Did you know Vernon Scott?

A. Yes, I knew him casually.

Q. Okay. Well, did you all go into each other's homes or socialize?

A. No.

Q. Okay. When did you know him?

A. Oh, I probably knew him from the time I came to here work in 1955 until he retired.

Q. All right. Was he working here at that time?

A. Yes.

Q. In 1955, when you came to work, what was your job?

A. I worked in the maintenance Engineering Department as a clerk.

Q. All right. Did you have anything to do with the activities out in the field, I suppose it's called?

A. Yeah, all over the plant. We made — I belong to an industrial engineering group, and we did studies of all the activities in the maintenance department and operations --

Q. All right.

A. — over the whole plant.

Q. Was Vernon Scott involved in maintenance?

A. He was in maintenance at that time; yes, sir.

Q. Do you remember exactly what he did?

A. He was an instrument mechanic.

Q. Okay. Did you become familiar with the day-to-day activities of an instrument mechanic?

A. Not to a large extent. We did very few studies of instrument work.

Q. Okay. Well, just from being around, were you familiar with what they did?

A. Yes.

Q. Okay. When you first came to work here, were you involved in insulation?

A. Only through the studies that I mentioned. We made studies of the insulation operations.

Q. What did they consist of, when you say "studies"?

A. Well, time and motion-type studies;

operations in the field and the fabricating shop, when we finally got it going.

Q. Okay. What did the insulators do in the field? Just briefly describe their activities.

A. Well, they would apply thermal insulation to piping and equipment, hot and cold.

Q. Were these people who were employed by Union Carbide?

A. Yes. Also, we had a contract group that supplemented their activity.

Q. Do you remember the name of the contract group?

A. Well, there have been several in here. Industrial Insulators had a contract group.

Q. Where are they --

A. Out of Houston. And then Johns-Manville had the maintenance contract for years. They were out of Houston. And that's all up to the Vernon Scott that I can remember.

Q. Okay.

A. There were others, but I'm not familiar with them.

Q. Well, now --

A. See, this is from '68 that I'm talking about the contractors, because I didn't have any

connection with them prior to that.

Q. All right. So when you are talking about the outside people who had contracts, you are talking about a period from '68, then, to '77. Is that correct?

A. That's what I'm referring to.

Q. Okay. Back in '55, when you were making time and motion studies of the insulators, were you aware of what products they were using?

A. Well, I don't know exactly what year we studied the insulators. I don't think it was that early.

Yes, I was familiar with some of the products that they had.

Q. Well, can you name some of them that you remember seeing?

A. Well, we had the Johns-Manville materials and Owens-Corning types.

A05373

Q. All right.

A. And, of course, this Ruberoid thing. Like I say, it was sporadic. Pabco, same way.

Q. All right. If you can, when you say "Johns-Manville," specifically do you remember the name of any type of product that was present?

A. Well, not at that time. Not until '68 did

I become real familiar with the trade names and that kind of thing.

Q. Okay. Well, prior to '68, did you see some of these manufacturers' names around the plant, or how --

A. Yes; cartons and whatnot.

Q. Cartons? All right. Well, did they have any identification on them as to what materials the products contained? Do you have any --

A. I don't recollect them having any identification -- identifying material names on it.

Q. All right. When you say that the insulators would apply the insulation to the various pipes and things out in the field there, basically what does Owens-Corning do? What do they manufacture here?

A. We, they manufacture pipe insulation, flat block --

Q. Excuse me. Did I say Owens-Corning?

A. Yes.

Q. I'm sorry. I meant, what does Union Carbide manufacture here?

A. Chemicals and plastics.

Q. Okay. See, the jury is not going to be aware of exactly what this -- I mean, we all drove

past the plant as we came here today.

A. Sure; right.

Q. But if you can describe how this is done at the Union Carbide plant --

A. I'm afraid I can't get into too much detail on that part of it, because I don't know.

Q. Well, I mean, in buildings or out in the open air?

A. Both.

Q. Okey. And do the chemical manufacturing processes involve building-up of heat?

A. Sure.

Q. And what types of vessels are used? How would you describe --

A. We have these fractionating columns. You have heaters and distillation stills; the whole bit.

Q. Are these, some of them, very large in size?

A. Some of them are good size.

Q. When you say that, do you mean 100 feet high, or 200, or what?

A. Sure. We've got them up to 250 foot high.

Q. Okay. Do all these columns require insulation from heat?

A. No.

A05373

Q. About what percentage of them do? Half or more, or --

A. Yes. I'd say about 80 percent.

Q. Do require --

A. -- some type of insulation.

Q. Is it mainly heat insulation or to keep cool?

A. Both.

Q. So when you say "both," it would be both to keep things cold or --

A. Right.

Q. -- or to keep things hot?

A. Right.

Q. Okay. As part of the ongoing manufacturing process, are these columns ever torn down?

A. Frequently.

Q. Why do they need to do that?

A. Well, a lot of times, the sieve trays inside the thing need to be removed. It's got -- it's messed up or plugged up. And they have to get in and replace them or clean them or --

Q. When you say that, are you saying --

A. Sieve trays.

Q. S-i-e-v-e trays?

A. Right, the internal part of the column.

Q. When it has to be replaced, does the column have to be torn down?

A. Not always. It depends on the type column. It's a sectional column. They can take it down in pieces and remove them and take them out of a manway.

Q. Take them out of a what?

A. A manwey. You have got a hole in that thing, and you can go in and get them out.

Q. Okay. When the columns are being torn down, does the insulation have to come off?

A. Oh, yeah.

Q. And what does that involve?

A. Well, it usually involves removing enough insulation to where the ironworkers can get up there to use their wrenches to remove the bolts that bolt it together.

Q. Is it torn off or cut off or what? When I say "Is it," I'm talking about — really, has the process changed that much, as far as applying this insulation, since the 50's when you came to work?

A. No, not a whole lot. A056377

Q. Okay. Well, then, generally, in asking these questions, I'm talking about this entire period —

A. Sure.

Q. -- of the 50's and '60's and '70's or so, even though I'm saying "is," or using the present tense.

Now, does it involve just ripping the insulation off?

A. Well, you have a jacket on it, a weather protection -- it could be either a mastic or could be a metal jacket -- which has to be removed first. Then the insulation is secured under that with banding materials, and these are cut, and the pieces of insulation are removed.

Q. Is dust created when the insulation is cut?

A. Sure.

Q. Okay. Now, when the sieves or whatever are replaced and the columns are built up again or reassembled, do you put the old insulation back, or --

A. Yes, sir. If it's salvageable, we reuse it.

Q. Is there sometimes new insulation put on?

A. Definitely.

A03378

Q. Now, does it come out of the box ready to fit on to these columns, or does it have to be shaped?

A. It has to be shaped.

Q. And where is that done?

A. Now or --

Q. Well, when you first came to work here, where was that done?

A. Well, what they -- what we probably did before we had the fabricating shop is to buy the flat block -- in the instance of a column, it already had the edges beveled -- from our vendor, whoever that might be, out of Houston generally. They would do the beveling work on the block.

Q. Okay. Well, then, would it just fit without any alteration on the column, or would you have to cut holes?

A. You would have to cut holes to go around any protrusions or whatnot that might be in the way.

Q. And what was that done with?

A. Saw.

AJ537

Q. A saw?

Q. Keyhole saw, hand saw, knife.

Q. When that was cut, was dust created?

A. Sure.

Q. Okay. And then when the fabrication shop was built, did they still have to do some cutting out on the site itself?

A. Sure.

Q. And when the old insulation was torn off was dust created?

A. Yes.

Q. Back in the '50's and the '60's, were any precautions taken, as far as the breathing of this dust, either by the insulators or by anybody else working around it?

A. Well, I know in the '60's, many of these people started wearing respirators of their own volition. I mean, they weren't required to necessarily, but they would.

Q. Okay.

A. Probably if for no other reason than nuisance dust problem.

Q. When you say "respirators," were these mechanical devices or just a face mask or something?

A. Face mask type with a throw-away filter in them.

Q. Did you ever wear one of those?

A. Sure.

Q. Did it do the job? I mean, did it keep out the dust?

A. Sure; sure did.

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Q. Well, when insulation was being torn off or being reapplied or being cut and so forth, would other employees be in the area? Specifically, instrument mechanics: Would they be in the area at the —

A. They could be.

A. Okay. And did they work below where the insulation was being torn off?

A. Possibly, yes.

Q. All right. If an instrument mechanic was working below, or any employee was working below where this insulation was being installed back in the 50's and '60's, would they have been in a position where they would breathe the dust —

A. Sure.

Q. — from it? Okay. Back in the '50's and '60's, were any of these other employees given any type of respirators or masks to wear?

A. Not to my recollection.

Q. Do you recall any general warnings being posted — I say "general"; just warnings of any type -- around the plant here telling people that if they are working around where insulation is being cut, to wear a mask?A05381

A. No.

Q. Now --

MR. KENDALL: Excuse me. Are we talking about a particular time here?

MR. WEDDINGTON: Well, I said "in the 50's and '60's."

THE WITNESS: And I said no.

BY MR. WEDDINGTON:

Q. When is the first time that --

A. Early '70's, probably. I don't recall what year.

Q. Okay. In the early '70's, then, who was required to wear a mask? Everyone?

A. Well, nobody right away. I can't remember when that went into effect. Probably '72, '73, maybe; somewhereas in there. At the earliest, maybe. It all probably stemmed from -- we had a visit from the Selikoff group here in the plant back in those days.

Q. Back in the early '70's?

A. Yes, back in there someplace.

A05302

Q. Okay.

A. Of course, our Industrial Hygiene Department was getting active about that time and running particle checks on various operations that we performed. Just where all this was in time, I

can't remember exactly.

Q. Just sometime in the early '70's?

A. I would say so, yes.

Q. After the Selikoff group -- and who was the Selikoff --

A. I don't remember who they were. Just several of them.

Q. All right. Well, I mean, were they doctors?

A. Johns-Manville had them in here, requesting that they come in and see our operation.

Q. All right. Were you told what they found, as far as the level of particles?

A. They didn't make any checks.

Q. Okay.

A. At that time.

Q. All right.

A. Just observed.

Q. Were checks later made?

A. Sure were.

Q. When was that?

A. It was right in that same time period. I can't remember exactly.

Q. Who made the checks?

A. Our --

A05303

Q. Your own --

A. Our Industrial Hygiene Department.

Q. All right. Were you informed of what the --

A. Sure was.

Q. What was the situation?

A. The levels of dust, they let us know exactly what the readings were on each one that they monitored.

Q. Where were they monitoring?

A. The only ones monitored at first was in the fabrication shop, because it was the biggest source of dust on our saws and that type of thing; band saws --

Q. Right.

A. -- and table saws and that --

Q. Did they later monitor out around the columns in the field?

A. Oh, yeah. Oh, yeah. It was an ongoing thing.

A05384

Q. Okay. When they first monitored around the columns out in the field there, what did they determine about the levels of dust?

A. I can't recall any bad readings back then, even when they weren't taking all the precautions

that we do now.

Q. What precautions are taken now?

A. Well, we remove it. We don't apply any more asbestos material, but removal is done according to OSHA Standards as set forth for the removal of asbestos.

Q. Is there still asbestos insulation?

A. Sure.

Q. What do you do when you remove it now? What precautions?

A. You want all of it?

Q. I'm not sure if I do down to the last detail, but I --

A. Well, to begin with, we have to barricade the area involved; put up signs according to the OSHA Standards, stating that the material is hazardous to health and all that, so that if anybody is coming by they can see this.

We suit the people out that's going to be working with it with coveralls and with cloth hoods over their head, and with some kind of foot protection. It could be boots or whatever. They wear gloves, and they wear a special-type respirator that OSHA has approved. And they get with it.

A05383

A. I have; but I mean, it didn't have any marking on it, per se.

Q. All right. Do you remember what it said on it even?

A. Well, the word "Thermobestos," and seems like it had a temperature printed on it. You know, the temperature that the material was good for. And J-M; the letters on it.

Q. How far back do you remember seeing those boxes?

A. Well, I'd say -- guessing, about in the '60's; the early '60's, about.

Q. Okay. Do you remember seeing boxes marked Owens-Corning?

A. Yes.

Q. What did they have written on them?

A. More or less the same thing.

Q. Well, I mean, they didn't have Thermobestos written on them. What did they —

A. No; Kaylo. At that time there was two, Kaylo and Kaylo 20. Kaylo 20 was good for a higher temperature.

A05307

Q. Did it have any warnings on it?

A. No.

Q. Now, do you remember seeing any boxes

marked either Pittsburgh Corning or PPG?

A. No; no.

Q. All right. Do you know the name of the asbestos product made by Pittsburgh Corning?

A. Unibestos.

Q. All right. Can you recognize that particular product?

A. Sure.

Q. What does it look like? I mean, can you --

A. Well, it's kind of -- to me, it looks like it's made up in layers, rather than a solid form. But it's like you described earlier, kind of a grayish with maybe a green cast to it. And it has long -- the insulators call them thorns -- thorns in it, and they will stick you.

Q. Okay. You didn't see the boxes with the name on it?

A. This is the old stuff, mostly. See, I never did buy any or have anything to do with the new materials.

Q. Well, when did you start doing the buying?

A. '68.

Q. '68? Okay. A05308

You say you have seen the old. How did you know that that was Unibestos?

A. Well, in talking about the insulators and with the foreman that had my job at that time.

Q. Okay. And who was that?

A. Mr. Endicott.

Q. Is he still alive?

A. No. He died.

Q. Did he maintain any records or invoices showing --

A. Very little.

Q. Okay.

A. I've got some stuff that he had in 1967. That's about as far back as it goes.

Q. What other products, if any, have you seen boxes of or --

A. I have seen Ruberoid, Calsilite come in; sure.

Q. Beg your pardon?

A. Yes.

Q. When did you see that, if you remember?

A. Oh, I'd say the early '70's. I bought some, so I remember it.

Q. Do you remember who the manufacturer of that was?

A. Ruberoid.

Q. All right. That was --

A0538

A. They called it Calsilite.

Q. Oh, Calsilite. Okay. Any others?

A. Pabco.

Q. All right. And do you know who the manufacturer of that was?

A. Fibreboard Corporation.

Q. Any others?

A. As far as containing asbestos, I can't recall any others that I could say for certain. They mentioned Eagle-Picher, but I don't know that any of the materials had asbestos in them.

Q. Well, were the other products marked on the box as having asbestos?

A. Not having asbestos, no.

Q. How did you know that they contained asbestos?

A. I've still got the literature.

Q. All right. Did you bring some of that with you today?

A. Not the literature, no.

Q. Where would it be?

A. In my office.

Q. Do you have some invoices or sign-out sheets, bills of lading, anything of that nature, that show --

A. Yes.

Q. Could we get those? I think this might be a good time to look at those.

MR. WEDDINGTON: Let's go off the record.

(Discussion off the record.)

MR. WEDDINGTON: Where were we before we stopped? Would you read back the last three or four questions and answers, please?

(The requested testimony was read back by the reporter.)

MR. WEDDINGTON: Okay. Let's go back on the record.

BY MR. WEDDINGTON:

Q. Mr. Rapp, have you brought with you a box full of various records or invoices?

A. Yes.

Q. And what are these records?

A. They are copies of purchases that were made on the dates shown.

Q. All right. And starting about when?

A. 1967.

Q. Were these records kept by you in the ordinary course of business as supervisor of insulators here at Union Carbide?

A. Yes.

Q. All right. Regarding the statements filled out on them, were they made at or about the time of the actual sale or delivery of these products?

A. Correct.

Q. All right. Did you sign in all these or fill out any of the things on these particular requisitions or invoices?

A. No.

Q. Did you see them at the time?

A. Yes.

Q. All right. And when they would come in, what did they accompany?

A. They accompanied the material as shown on the document. A05302

Q. All right. And at that time, did you personally check to make sure the material listed on these invoices --

A. Not usually. There was a person from the Receiving Department that does that.

Q. All right. Was that at your office, or --

A. It was out at our warehouse, right.

Q. Okay. How would these invoices or these pieces of paper get to you?

A. These were a four-part or five-part form. This copy would go to the requisitioner, and that's the one that we have here (indicating).

Q. All right. Well, who is the requisitioner, then?

A. Me.

Q. And can you state, within your own personal knowledge, that generally these represent products that ended up at the plant?

A. Sure.

Q. Now, then, what were the names of the products that were sent to the plant here that were manufactured by Johns-Manville?

A. You have got -- well, of some of the ones that I recall, there would be Thermobestos, which was the pipe and block insulation; and 352, which was a cement insulator. It's Marionite board. This was a board similar to Transite.

And there was A-Cloth, which was asbestos cloth in a roll; Flexstone; and Firetard jacketing, which was similar to a roofing felt that contained

asbestos fibers.

Q. Okay.

MR. WEDDINGTON: Let me have the court reporter mark this as Deposition Exhibit 1.

(The instrument referred to by Counsel was marked for identification as Rapp Exhibit No. 1.)

405304

BY MR. WEDDINGTON:

Q. Did this come out of your records?

A. Yes.

Q. And would you just briefly identify it?

A. Well, it's a copy of a purchase order that went through our Purchasing Department. It was not one of these four-part releases we discussed. And it was to Thorpe Products, and it was for Johns-Manville Thermobestos pipe insulation and flat block.

Q. All right. I notice that it has delivered to Building Number 216 written in hand on it.

A. Right.

Q. What was 216?

A. 216 is the building that houses the

insulation fabricating shop and my office.

Q. Do you recognize that handwriting?

A. No.

Q. Was it by some employee of Union Carbide?

A. Right.

Q. And was it put on there on or about the time that it was delivered?

A. That's correct.

Q. And was that done in the ordinary course of business?

A. Yes.

Q. Okay.

MR. KENDALL: Does that have a date on it?

THE WITNESS: Yes. It's March 24th, '80 — '70, I mean. I beg your pardon.

BY MR. WEDDINGTON:

Q. 1970? Okay.

Now, what products did Owens-Corning make?

A. Well, for the most part, we bought the pipe and block insulation manufactured by Owens-Corning called Kaylo and Kaylo 20.

Q. Okay.

MR. WEDDINGTON: Let's mark these as exhibits.

(The instruments referred to by Counsel were marked for identification as Rapp Exhibit No. 2.)

BY MR. WEDDINGTON:

Q. All right. We have marked these two pages as Exhibit 2. And what's the date on them?

A. Okay. The date is June the 19th, '68.

Q. On one; and the other one?

A. The other one was the 26th — 25th of '68.

Q. June 25th of '68?

A. Right, uh-huh.

Q. And what do they represent?

A. These are both four-part releases from Industrial Insulators covering purchase of Kaylo 10 pipe insulation and Kaylo 10 block insulation.

Q. And were those made in the ordinary course of business?

A. Yes.

Q. And by someone who was personally aware of the facts?

A. The facts of what?

Q. Well, the facts as indicated; for instance,

that the cartons of Kaylo were ordered and so forth.

A. Yes.

Q. All right. Now, are there other papers in your records here referring to Kaylo?

A. Yes.

Q. And are there other papers referring to Thermobestos or other Johns-Manville products?

A. Yes.

Q. So these aren't the only two records concerning those?

A. No.

Q. All right.

MR. WEDDINGTON: Let's mark these as Exhibit Number 3.

AUS307

(The instruments referred to by Counsel were marked for identification as Rapp Exhibit No. 3.)

BY MR. WEDDINGTON:

Q. All right. What are the dates on these that we've marked as Exhibit Number 3?

A. We've got one that's a four-part release dated April 17, 1970.

Q. And the other?

A. And the other is a four-part release dated April 21st, '71.

Q. All right. And to what products do they refer?

A. Well, actually, there's two products on each of them. Are you interested in both of them?

Q. Well, one is Kaylo. But what's the other?

A. The other product is Unibestos, which is a -- in this instance, it was pipe insulation manufactured by Pittsburgh Corning.

Q. Okay. And were these documents kept in the regular course of business for Union Carbide?

A. Yes.

Q. And was this information filled out at or near the time of the purchase or the delivery by somebody who was personally aware of the facts?

A. Right.

Q. Now, the rest of these, I'm just going to have her mark as a group, which will be Exhibit Number 4.

(The instruments referred to by Counsel were marked for identification as Rapp

Exhibit No. 4.)

BY MR. WEDDINGTON:

Q. All right. Now, let's see. We've gotten other pages of records here that we've marked as Exhibit Number 4. And if you would, just tell us which products they refer to.

A. Okay. The first one here refers to Benjamin-Foster adhesive called 81-27 Fibrous Adhesive.

Q. Did that contain asbestos?

A. Yes.

Q. And Benjamin-Foster was the manufacturer?

A. Right.

Q. And the next one then?

A. Then we had — this refers to two 100-pound bags of Keene cement, which was an insulating cement. I do not know whether it contained asbestos, because it doesn't have any identification as to which one it was.

Q. All right. The next one?

A. That one covers CareyTemp pipe insulation, which is a Philip Carey product. It didn't contain asbestos.

Q. It did not?

A. No.

And then you have Kaylo 10 AF, which means asbestos-free.

Q. Did you find any other asbestos-free pipe covering, other than that?

A. Some from Pabco, which had NA, or non-asbestos.

Q. But this is the one only one from Kaylo?

A. That's the only one I could find.

Q. And the date of that?

A. September 25th, 1972.

Then we have got Calsilite pipe covering, which is a product manufactured by Ruberoid Company, which contains asbestos.

400340

Q. Okay.

A. Same thing for the next one.

Q. All right.

A. Then we've got one with Philip Carey, pipe cover; and Pabco CalTemp pipe insulation. Carey didn't have the asbestos, and I can't tell you for sure whether this Pabco in 1973 — which is the date on this release — contained asbestos.

Q. Okay. The next one?

A. Okay. This is Pabco flat block and Philip Carey block insulation. The flat block possibly

had asbestos. This was 1972. CareyTemp did not.

Q. All right.

A. And we've got some Eagle-Picher One-Cote cement. According to their literature, you can't tell whether it did or didn't contain asbestos.

And also on here is CareyTemp pipe insulation, not asbestos; and some Foamglas pipe cover, which is non-asbestos. This was in '73.

Q. All right.

A. We've got an Eagle-Picher six-pound-density felt with one-inch hex mesh on one side. This doesn't contain asbestos.

The last one is Armstrong 520 adhesive, which is a contact cement. There is no asbestos in that one.

MR. WEDDINGTON: Go ahead and mark these as Number 5. A05401

(The instruments referred to by Counsel were marked for identification as Rapp Exhibit No. 5.)

BY MR. WEDDINGTON:

Q. All right. We've marked these other two

pages as Exhibit Number 5, and there are some --

A. Well, the release form shows these products to be Kaylo 10 block insulation, and then there's one item of pipe insulation on here. But then the "Kaylo 10" is circled and "Pyrocal" written down below. At this point, I can't remember what this meant exactly, except that the vendor probably substituteed some material for the Kaylo.

Q. Is the Pyrocal written in your handwriting?

A. That's mine.

Q. Is Pyrocal a type of insulation?

A. I don't know. I can't remember.

Q. All right. Now, do these invoices or these release forms or whatever -- these pieces of paper that refer to different types of insulation products -- are they representative of the quantity of insulation from the different manufacturers that was present back in the 50's and the '60's and the '70's, or --

A. That's changed periodically.

Q. Okay. Well, in other words, if --

A. If I had known who got the contract as to what type of -- or not the type, but whose brand he got --

Q. Well, what I'm saying is if there were five of the release forms from one manufacturer and only one from another manufacturer, would that necessarily indicate that there were five times as many --

A. Sure; pretty much representative over the period.

Q. As to prior to '68, do you have any idea what the ratio would be, as far as manufacturers?

A. No.

Q. How long would the insulation stay up on some of these columns before the columns would have to be torn down?

A. Well, there's some of them that still have some of the original insulation on them.

Q. Okay. Well, were some of the columns torn down, say, every five years or every two years?

A. Sure, some of them.

Q. Would it be likely that insulation could have been sold or installed back in '48 or '49, and then 10 years later torn off?

A. Yes.

Q. 20 years later torn off?

A. Yes.

Q. Okay. And any number that I might choose

in between?

A. Right, from '41.

Q. Any time on?

A. Right.

Q. All right. You said that Johns-Manville at one point had a contract to supply insulation?

A. No. They had a labor contract only.

Q. Did they put up their own materials or other people's?

A. No. We bought the material, and they installed whatever we supplied them.

Q. When was that, or when --

A. Well, I can't recall exactly the year they first came in here. Probably about '69, I guess. And then I suppose they had that contract through '79

Q. Okay.

A. 10 years, anyway.

Q. During the time from '68 until '73 or so, when you stopped using asbestos insulation, did you receive any literature from any of these manufacturers warning you about dangers from breathing asbestos dust?

A. Not from the manufacturers.

Q. Did any of their sales representatives or factory representatives or whatever -- anybody that

claimed to be from any of these manufacturers that we have mentioned -- ever come around and give you any warnings orally?

A. No.

Q. How about the distributors? Did they send you anything, or --

A. Not really.

Q. Well, you say, "Not really." That, to a lawyer, picks up his ears. What --

A. I can't be for certain. There could have been some literature, say, around 1972 or '73 come from some of these vendors. But I'm not positive about this. I got a whole bunch of junk about that time from several directions.

Q. Well, did any of the distributors or vendors come in and talk to you about instituting any kind of safety precautions, such as wearing --

A. No.

Q. -- such as wearing these suits?

A. No.

Q. Did any of them tell you or write you telling you to let you know that you and the men should wear respirators?

A. No.

Q. Okay.

MR. WEDDINGTON: I'm going to go ahead and pass the witness.

(Discussion off the record.)

MR. WEDDINGTON: I'll pass to Mr. Gillespie, who has some questions.

EXAMINATION

BY MR. GILLESPIE:

Q. Mr. Rapp, I just have a couple of questions for you before I pass you on to another attorney for more questioning.

Just so that the jury who might end up hearing this case will have an idea of what the Union Carbide operation involves here in Texas City, how many insulators do you have under your supervision and control out here at the present time?

A. 28.

Q. 28? And these 28 people --

A. Plus three contractors.

Q. Okay. Now, 28 are then full-time Union

Carbide employees who do nothing but install and remove insulation from the pipes?

A. Right.

Q. And then you said you had three contractors who are also under your supervision?

A. Yes.

Q. And these contractors are who at the present time?

A. Tellepsen Construction Company.

Q. Okay. And they have a number of employees that they bring out here also?

A. Other crafts.

Q. Oh, other crafts?

A. Right.

Q. As far as full-time insulators go, approximately how many full-time insulators do you have working at your plant pretty much on a daily basis?

A. Well, at the present time, I have 31 total.

Q. Did you have a similar number back in 1968 when you took over this phase of the operation out here?

A. Probably about that, yeah.

Q. So this number of insulators, full-time insulators, would be basically constant over —

A. You say "full-time." You are talking about a combination of the contract and the Carbide folks?

Q. Yes.

A. Because, you see, the contract is temporary, really.

Q. How about as far as the Union Carbide folks go?

A. It's pretty much stayed the same. It's probably gone up to 37 possibly, and it's down to about as low as it's been right now.

Q. Okay. I was wanting to get a couple of other things clarified also. Now, a couple of times during the course of your deposition, the Fabrication Department has been brought up. And when was the Fabrication Department set up here at Union Carbide?

A. I'm not sure what year that was, because I wasn't involved in it at that time. It was there when I came in '68.

Q. So it was before '68?

A. Oh, yeah.

Q. Do you have any idea? Was it a few years before?

A. I'd say maybe around 1969 or -- I mean '59

or '60, approximately.

Q. Okay. And was that Fabrication Department used strictly by the insulators, or is it used by other departments also?

A. Insulators.

Q. And the Fabrication Department, just for clarification purposes, is just for working with some of the insulating products before it is actually installed on the pipes. Is that correct?

A. Right.

Q. Okay. And another question I had concerned some of these precautionary procedures that are now being utilized by Union Carbide. In particular, you had mentioned how during the course of removal of the asbestos or the insulating products from around the pipes that a barricaded area would be set up to --

A. This is only done with asbestos.

Q. It's only done with asbestos products?

A. Right.

Q. But you were talking about the procedure involved, as far as barricading the areas, and warning signs, and having respirators and special suits, gloves and boots, wetting down the insulation before you started cutting on it,

bagging the insulation and placing warnings on the bags. Approximately when were those procedures instituted?

A. We probably started -- like I say, we didn't get into it full scale right away; but right shortly after '73, I think.

Q. Okay. I think I've got another question also. There was an outfit that has been referred to a couple of times in your deposition, referred to as the Selikoff group.

A. Uh-huh.

Q. And what is the nature of that group of people?

A. Well, he's done extensive studies on asbestos workers all over the country in trying to -- I don't know what exactly he's trying to do, but he's out of the Mount Sinai Hospital is where he's located.

Q. Okay. And they came to the Union Carbide plant here in Texas City -- am I also right in thinking this -- somewhere around the early part of the '70's?

A. I think so; right.

Q. And these procedures that Union Carbide is taking have been as a result of the work that they

have done here in the Union Carbide plant with the health department?

A. No. They were instrumental, I'm sure, in getting the OSHA Standard where it is, and that's the only connection they have had with what we do.

Q. Okay. Then who was it that instituted the standards out here? Was that —

A. By our Industrial Hygiene Department.

Q. Of Union Carbide?

A. Right.

Q. Okay.

MR. GILLESPIE: Pass the witness.

EXAMINATION

BY MR. KENDALL:

Q. I'm David Kendall, Mr. Repp, and I represent Johns-Manville. I hope I don't repeat too much of what's been said, but I may.

What is your educational background? How far did you go in school?

A. High school.

Q. And when did you complete high school?

A. '42.

Q. What did you do after that?

A. Service. I came out after that and worked for a commercial refrigeration and air conditioning company for seven and a half years. Then I went to work as a construction inspector for three years on a housing project.

Q. A housing project? For whom were you working as an inspector?

A. For architects, actually, who were employed by the Galveston Housing Authority.

Q. Whatever engineering background and training you have is on-the-job?

A. Correct.

Q. And when you first came to Union Carbide, you came as a clerk in the Engineering Department?

A. Right.

Q. And then did you work up in that position? I assume you weren't a clerk one day and a Superintendent of Maintenance the next.

A. Almost that way.

Q. It was? What sort of jobs did you have from '55 to '68?

A. I worked for 12 years at this job that I talked about earlier in the Industrial Engineering Department, making studies and all this good stuff.

And just briefly I got out into the Contract Work Section; inspected work for them for about six months, I guess.

Q. During that period of time, what was Union Carbide manufacturing?

A. Chemicals and plastics.

Q. As a manufacturer of chemicals, I gather it must have a large number of chemists and people of that sort on its payroll.

A. Sure.

Q. Does the building we're in now -- I thought I saw a door that said "Safety," or something like that.

A. Uh-huh.

Q. Did it then have a Safety Department? Yes, it always has.

Q. Is that what's called Industrial Hygiene, or is that something else?

A. No. That's separate.

Q. That's separate?

A. Yes.

Q. What is Safety concerned with?

A. Safety is concerned with the day-to-day problems, seeing that the procedures are written or carried out, inspecting the job for safe practices,

giving the proper instruction to the people that actually have to do the work; this type of thing.

Q. What does Industrial Hygiene have to do with.

A. They establish the policies and everything as to how we're going to perform a job, and the necessary precautions we need to take for our own personal health, et cetera, considerations.

Q. I would imagine in a chemical plant there are a lot of chemicals to which an employee is exposed which can be hazardous to them. Is that not true?

A. True.

Q. Is that true at Union Carbide?

A. True.

Q. Back in the 50's?

A. True.

Q. And did they have a department that was concerned with looking into that?

A. Nothing like it is today, if it was available at all. I don't know.

Q. Do you know whether in the 50's or early 1960 they had any doctors or people on the staff who tried to keep abreast of current developments in science and medicine and so forth?

AC5413-A

A. Oh, yes. They have always had a full-time physician since I've been here.

Q. With that sort of responsibility?

A. Yes, actually.

Q. Do you recall who that may have been over the years, or —

A. Well, there's been several. I think there was a Dr. Durnell here.

THE WITNESS: Wasn't there, Joe? Was that his name?

MR. SULA: (Indicating yes.)

THE WITNESS: That was before my time. Who was that cat that followed him?

BY MR. KENDALL:

Q. Can you recall who it was in early 1960?

A. That's who I'm trying to think of.

THE WITNESS: What was his name?

MR. SULA: Durnell and Joyner.

BY MR. KENDALL:

Q. Joyner? Dr. Joyner?

A. Joyner; right. A05414

Q. Is he still around?

A. No.

Q. Is he dead or still living?

A. Seems like he's still living. Seems like

he want to Colorado or something.

MR. SULA: He's Corporate Medical Director for Shell Oil Company.

MR. KENDALL: And where is that located?

MR. SULA: Houston, Texas.

MR. KENDALL: Houston. While we have you going, what is his first name? Do you know?

MR. SULA: Dr. Roy E. Joyner.

MR. WEDDINGTON: All right. We might identify that that's Mr. Sula.

BY MR. KENDALL:

Q. All right. Did they from time to time come out with directives about products which were being manufactured in the plant?

A. Yes.

Q. Warnings about —

A. Yes.

Q. -- exposure?

A. Right, and outside the plant.

Q. And outside? Did Union Carbide, in the early '60's, manufacture any vinyl chloride?

A. Yeah.

Q. They did?

A. Sure.

Q. And that was a very dangerous one, was it not; exposure to it?

A. We didn't realize it at the time. Just like the asbestos, I suppose.

Q. When did you first realize that there was any danger at all involved in working with asbestos?

A. The early '70's.

Q. That was your first knowledge?

A. Right.

Q. Nobody in your corporate setup, your Safety Division or whatever that's called, or your Industrial Hygiene, or Dr. Joyner or anybody else ever came down to you and said, "Hey, they're discovering all sorts of things about asbestos"?

A. No.

Q. Now, while we're on that subject, you just toward the end of Mr. Weddington's questioning of you said that you had never received any word from the manufacturers; any caution. Did you have direct contact with the manufacturers?

A. Not really. I've met some of the manufacturer reps from time to time, but it was through the distributor or the vendor.

Q. And did you yourself have contact with the

vendors on the level that if they were going to give Union Carbide notice of something having to do with the products that were being sold to the company, that they would have told you, as opposed to somebody else in the corporation?

A. I would have probably known about it the same time as anybody else, considering some of the contacts that I had.

Q. In the '60's, after you started working with the insulation directly, what was the chain of command? Who did you work under?

A. Well, I was the end of the totem pole, I guess; the bottom of the totem pole. I had --

Q. What do you mean exactly?

Q. Well, I had umpteen bosses.

Q. You were what? Supervisor of Maintenance?

A. I was a first-line supervisor.

Q. And then who would you report to?

A. Then I've got a second-line supervisor that's called a superintendent. He has a boss called the department head, and he's got a boss called a superintendent, and he has a boss called APM, and he has a boss called Damon Engle, who is the Plant Manager. So it goes.

Q. So there are several steps up above you in

AC54-7

the hierarchy. And is it possible -- what I'm asking you -- if a manufacturer wanted to communicate something to Union Carbide about a product, that it would communicate it, say, to the Plant Manager or --

A. It's been done.

Q. And whether it filtered on down to you or not, you don't know?

A. That's right. I wouldn't think that would be the usual way of communicating; but, as I say, it's been done.

Q. From whom in the '60's and, say, the early '70's did Union Carbide purchase Johns-Manville products? I think the one invoice we have is Thorpe. Is that right?

A. Thorpe; right. Thorpe Products.

Q. Where are they located?

A. Out of Houston.

Q. As far as you know, they are completely independent? They are an independent dealer, are they not?

A. Right. Some of the other vendors, though, would sell Johns-Manville products.

Q. A lot of people sell their products?

A. Right.

Q. But when you ordered it, you would order it probably from Thorpe or from one of those others, and you wouldn't write to New York City or to Denver and order it from the headquarters?

A. No, huh-uh.

Q. And after you ordered it, did Union Carbide stockpile things like Thermobestos?

A. I can't recall them really stockpiling Thermobestos at any time since I've been in it.

Q. Did they have any sort of a warehouse or storehouse --

A. Yes.

Q. -- where they kept these products?

A. Yes.

Q. Located on this --

A. Yes.

Q. -- property here?

A. Right.

Q. What building number is that? Do you know that?

A. That happens to be the same building that I'm in, 216, right now.

Q. Who, if you can recall, back at the time in '68 when you became directly involved with insulation, was in charge of the storing and

whatever of asbestos insulation?

THE WITNESS: J. B. Schmidt? Is that right, Joe? Who was it?

A. J. B. Schmidt, I think it was. I believe J. B. Schmidt had the storeroom operation.

BY MR. KENDALL:

Q. Is he still with the company?

A. No. He's retired.

Q. Do you know where he is?

A. He lives in Galveston.

Q. He lives in Galveston?

A. Yes.

Q. And it's J. B. Schmidt?

A. J. B. Schmidt.

Q. Is that a large or small operation?

A. It's a pretty fair-size operation.

Q. And if you needed something for a particular job today --

A. Not so much the insulation part of it isn't too big. But I mean overall.

Q. But if an insulator was working on a tower or a piece of equipment and he needed some Thermobestos pipe covering of a certain size, he wouldn't have to wait until you wrote to a supplier?

A. No.

Q. He would go to the storehouse and get it or send someone to get it?

A. Right. That's right.

Q. Prior to the early 1970's, when you say you first learned that asbestos could be harmful, was Union Carbide doing anything that you could see or that you were aware of to protect its employees from inhaling asbestos dust?

A. Not asbestos, per se, no.

Q. Or dust?

A. Dust, yes.

Q. And to protect its insulators --

A. It wasn't what you would call a mandatory thing, but they were provided with respiration equipment.

Q. But what were the men told about wearing it?

A. Not really a whole lot. I mean, it was up to their own discretion or whatever.

Q. Do you know who manufactured the masks?

A. We had several kinds. American Optical; let's see.

THE WITNESS: What's that other one, Joe, that was prevalent?

A. (Continuing) MSA.

AC5421

measuring --

A. They weren't measuring anything. They were just observing.

Q. Observing?

A. That's all.

Q. And they were primarily interested in your shop, I think you said?

A. Right.

Q. What sort of protective equipment or devices did Union Carbide have in their shop in the early 1970's?

A. Well, ever since that shop's been where it is today, it's had a dust collection system that was connected with each piece of equipment there, cutting equipment, plus the fact that the -- like I say, the respirators were made available to those that cared to use them is about what it boiled down to.

Q. I think you have indicated before, I guess, that even with this dust-collecting system, that was still the dustiest place that your men would work?

A. Right, since it was enclosed.

Q. After the OSHA people came around, did they change the dust-collecting equipment in any

AC5420

way?

A. No. We've had real good readings down there from the Industrial Hygiene department. There wasn't any reason to change it.

Q. When did they start making readings?

A. Right about that same time.

Q. Did they ever tell you that there was a threshold limit value to which a man could safely be exposed in the --

A. I don't believe anybody knows what's safe; that they have ever established that's safe.

Q. Without agreeing with you or disagreeing with you, did they ever tell you in the early 1970's --

A. Yeah.

Q. They did?

A. Right. They told us what OSHA said: how many parts per million, whatever it was; so many centimeters, fibers so long, and and all that.

Q. And if you inhaled less than that, you were okay?

A. They were inclined to believe that way. It was a time-weighted thing.

Q. And you said that Johns-Manville was instrumental in getting Selikoff --

A. Yes.

Q. -- to come in? Do you know why that was?

A. No, not really, except for the fact that they were probably working pretty close with him in trying to do something about this asbestos problem that came about.

Q. They were working with him in trying to improve the problem, whatever it was?

A. Right.

Q. And did they have a direct connection with your shop at that time?

A. Yes. At that time, I recall that we were doing business with Johns-Manville Sales Corporation. I remember that. I can't remember to what degree.

Q. On a contract, you mean?

A. Yeah, I believe it was. I'm not certain. But a man by the name of Claude Foster was with them at that time.

Q. Clark Foster?

A. Claude Foster. I knew him personally, and he's the one that asked me if we could get these people into the plant.

Q. Was he out of Houston or --

A. Yes. Actually, we did have a -- it was a

labor contract we had with them. That's how it worked.

Q. Do you have any lung problems as a result of breathing asbestos?

A. Haven't got it yet.

Q. Have you been examined periodically?

A. Yes.

Q. Does Union Carbide require that now of your people?

A. Definitely.

Q. And so far no one has found any problem with you?

A. Not with me.

MR. KENDALL: I have no other questions.

MR. MIZELL: I'll go next, then.

EXAMINATION

BY MR. MIZELL:

Q. Sir, my name is Walter Mizell, and I represent Pittsburgh Corning, one of the defendants in the lawsuit.

A. Right.

A0542

Q. First of all, I'd like to get an idea of the size of the operation here so the jury can understand what kind of a place this is. How many acres does the Union Carbide plant here cover, if you know?

A. I don't really know.

Q. Give me an estimate, if you don't mind.

A. It's about a mile long and half a mile wide, I guess.

Q. Somewhat over 200 acres, 300 acres?

A. I suppose.

Q. Half of a section?

A. Half a section, yes.

Q. Okay. And about how many people are employed here?

A. About 2300, I guess.

Q. 2300 hundred right now? Have that many been employed over the last 10 years or so?

A. At least.

Q. At some times, have there been more than that?

A. Yes.

Q. What's the highest you have ever known it to be?

A. 2600.

A-5542

Q. When was that?

A. Five or six years ago.

Q. Five or six?

A. Yeah.

Q. You need to speak up. I've got this thi coming right out above my ears.

A. That's bad news.

Q. About how much in an average year would the company spend at this plant for asbestos products, when they were buying asbestos products?

A. I haven't the foggiest idea.

Q. Well, if you looked back through these years when you have got these —

A. That's just a portion of what was bought. There's all kinds of other products in there besides asbestos products.

If I was going to guess -- it would be a guess -- 60 percent, 65 percent, maybe.

Q. Of the products that show up in these files are asbestos products?

A. Maybe 60 percent.

Q. Okay. And again, I'd just like some sort of an educated estimate --

A. Yeah.

Q. -- on your part as to how much that would

AC5427

translate into in dollars.

A. I don't know. I didn't start keeping those kinds of records until after the asbestos era.

Q. How much do they spend per month on insulation products?

A. Spend over a million dollars a year on materials.

Q. On insulation materials?

A. Right.

Q. Would you think it would have been in that same ballpark?

A. No.

Q. Less than that, or more?

A. Less.

Q. Half?

A. Possibly.

Q. Half a million dollars a year would be a rough estimate —

A. Rough.

Q. -- in the period of 1967 to '75?

A. Yeah.

Q. And of that half million dollars, something more than half of that would be spent on asbestos products?

A054428

A. I'd say so.

Q. Okay.

A. Now, I have no idea if that's right or wrong. I'm strictly guessing.

Q. But your guess is based upon your recollection and your knowledge of the buying practices. Right?

A. Yeah.

Q. And without going back through these records, that's about as close as you would want to venture today?

A. I sure wouldn't want to venture any farther than that.

Q. All right, sir.

A. I think, based on the records that I keep at the current time, I could go back and tell you a lot closer than that.

Q. You think you could?

A. Yeah.

Q. How long would it take you to do that?

A. It would take me a while to do that.

Q. Just for some representative year, any year you wanted to pick?

A. Oh, I could probably do it by tomorrow morning sometime.

A5542

Q. Would it take you more than an hour or so?

A. Yeah.

Q. I'm going to ask you to do that, please, sir, if you would, and we will just leave a blank in your deposition that you can fill in at the time you sign it.

A. Come to think about it, I'm not going to be here tomorrow.

Q. No, you won't have to do it tomorrow. You have several weeks to do it. But I'd like to you pick a year, and we will leave two blanks for you to fill in when you read and sign the deposition; one that tells the year, and one that tells the amount of money that Union Carbide spent at this plant in that year for insulation materials. Can you do that?

A. Sure.

Q. And that number would include all kinds, whether asbestos or not?

A. Yeah. I guess the best thing to do would be to get the first year that I started keeping the records. It would be closer to the period you're talking about.

Q. Okay. What year would that be?

A. Seems like -- it might have been around

1970.

Q. Somewhere around there?

A. It could have been that era.

Q. All right. Whatever year you feel the most confident with is fine; and whenever you fill it in, we'll know which one it was. Right?

MR. MIZELL: Would you put the blanks at this point in the deposition for him to fill in?

A. _____

_____

BY MR. MIZELL:

Q. The description that we have had from Mr. Scott about these columns where he was working: I get the impression it's fairly big around, like a big barrel or something, except it's a whole lot bigger than a barrel and a whole lot taller. Right?

A. That's right.

Q. And the material that would be mainly placed on there would be what you would call block insulation?

A. Right.

Q. Would you tell the jury the difference between block insulation and pipe insulation?

A. If I can show you --

MR. WEDDINGTON: No, you can't show it on there.

BY MR. MIZELL:

Q. The jury is not here. You can draw it on a piece of paper.

A. (Complying.)

Q. Would you just put on there whether these are pipe or block?

A. (Complying.)

Q. Now, would you draw the other kind, please, sir?

A. (Complying.)

Q. Okay. Now, the bottom one that you have shown there shows a cross-section view of a piece of pipe insulation. Right?

A. Right.

Q. Now, if you take one-half of a piece of pipe insulation, one-half of a cylinder, could you show it there?

A. I got it there. I already got it there.

Q. But you are looking at it straight on. Could you draw it if you turned it around?

A. You mean sideways?

Q. Yes; side view.

A. (Complying.)

Q. Something like that is what I had in mind (indicating). Do you see what I mean?

A. Yes.

Q. Would you draw something that looks like this on there, just to save me the time of trying to describe what I'm looking for?

A. (Complying.)

Q. Yes. That's fine.

A. What?

Q. That is fine. Go ahead.

A. (Complying.)

Q. All right. So in the center of the page you have got a piece of pipe insulation, and on the top you have got block?

A. Right.

Q. Would you put your name there at the bottom, please, sir?

A. (Complying.)

Q. All right. I would like for you, if you would, to tear it off and hand it to the court reporter so she can mark this.

(The instrument referred to by Counsel was marked for identification as Rapp

Exhibit No. 6.)

BY MR. MIZELL:

Q. And the diagram you just gave or made for us is marked as Exhibit Number 6 to the deposition of J. H. Rapp. Is that correct?

A. Yes.

Q. Now, again, the kind of insulation that goes on this column, when they take it apart and put it back on and put it back together, is essentially block insulation --

A. That's right.

Q. -- which is big square or rectangular sheets --

A. Right.

Q. -- which vary in thickness from what? A half-inch to two or three inches or so?

A. A half-inch to three or four inches.

Q. And you said they were beveled on the edges to fit?

A. That's right, without having a crack in them.

Q. I think I understand that, but I'm not sure I do. Are you saying that they are tapered so that when you put them edge to edge, they form a

circle around the column?

A. Yes. If it was cut off square at the sides, there would be a V-shaped gap or --

Q. When two of them came up together (indicating)?

A. No. This is why you bevel them, to keep them from having a gap. It's just like a barrel, and you put a stave around it. You have no gap between staves.

Q. Right. If it were not beveled, though, you would have a gap?

A. Right.

Q. So I take it that the people that were fabricating this for you would have an idea of the diameter of the column that you were working on, say, and they would know what angle to bevel it at?

A. That's right.

Q. Now, as far as the columns that we're talking about, as I understood your testimony earlier, you could have some columns in the plant now that have got stuff that was put on them by way of insulation material as far back as 1941.

A. That's a little exaggerated. I would guess we have asbestos insulation on columns today.

Q. You still have it on there?

A. Yes. I don't know exactly how long ago it's been. It's a possibility it could have been on there that long, but I wouldn't swear to it.

Q. And you can't tell the jury who made the stuff that's on there now?

A. Some of it, you could.

Q. Well, I mean from your own knowledge as you sit here today, you couldn't?

A. No.

Q. You have got the records here during your tenure as — what was it? Purchasing -- what was your title?

A. Well, I was the maintenance supervisor.

Q. Maintenance supervisor?

A. Right.

Q. But you were in charge of purchasing insulation material?

A. For my operation down there. There's other people in Purchasing that also purchase insulation for our store requirement --

THE WITNESS: -- which I believe you brought up (indicating.)

BY MR. MIZELL:

Q. But as far as your end of the operation is concerned, prior to 1967 --

A. Prior to 1967.

Q. -- before you got involved, you can't tell us what was bought through your operation?

A. No.

Q. And you don't know what exposure Mr. Scott had to particular products?

A. No.

Q. You can't tell the jury whether he was exposed to any particular Pittsburgh Corning product prior to 1967 or not?

A. No.

Q. And after 1967, you have gone through all your records; and with the help of the lawyers and everybody that's present here today, we've come up with two instances of products called Unibestos?

A. That's right.

Q. And that's Exhibit Number 3 that you identified a while ago. Is that right?

A. Yes. That's right.

Q. All right. Let's look at those together for a moment.

MR. MIZELL: First of all, I'd like to make sure they are marked so we can discuss them individually, so I'd like to have the court reporter mark these as 3-A and 3-B.

(The instruments referred to by Counsel were marked for identification as Rapp Exhibit Nos. 3-A and 3-B.)

BY MR. MIZELL:

Q. All right, sir. If you would take the top one, which is 3-A, would you describe to the jury what that shows by way of the Unibastos product that was purchased?

A. It shows that there was nine linear feet of 10-inch-by-inch-and-a-half pipe covering bought.

Q. This is not block; this is pipe covering?

A. Pipe covering.

Q. Nine linear feet?

A. Nine linear feet.

Q. And what was the date on that?

A. That's April 21st, 1971.

Q. Can you tell us how much that cost?

A. $1.61 a linear foot.

A. Times nine?

Q. Times nine.

Q. And it looks like that ends up to be --

A. $14.49.

A. Right.

Q. That's a fairly miniscule part of the total asbestos products purchased in that period, isn't it, sir?

A. Yes.

Q. And you don't have any idea in the world whether Mr. Scott was exposed to that pipe covering when it was being installed, do you?

A. No way.

Q. In fact, the chances of him being in the area when this miniscule amount was being put in is pretty slim, indeed, isn't it?

A. Sure.

Q. Okay. If you were to make an estimate of all the pipe covering and all the block insulation and all the other asbestos materials that were purchased in the period 1967 through 1975 where you have been concerned, the percentage of Unibestos that shows up on those two invoices or records there would be probably less than about -- far less than one-tenth of one percent, wouldn't it?

A. I would say that's probably correct.

Q. You mentioned a while ago when you were being asked about warnings that you never did get any warnings from the manufacturers, but that

leaves open the question of warnings from other sources; and the way you mentioned it, it made me think you did get some warnings from some other sources of information.

A. No other source of information except internal.

Q. And what were those again?

A. Those were the Industrial Hygiene Department and Medical Division.

Q. Do you know how they became alerted to the problem?

A. No, I couldn't answer that.

Q. Do you know when they became alerted to the problem?

A. Not exactly. Early '70's.

Q. Were you aware of any other literature, written articles, or anything else about it at that time?

A. We, I had read some of these little publications that the asbestos workers got about that time. That was about the only thing.

Q. Early '70's?

A. Yeah.

Q. Did you get the union publication?

A. I suppose it was. I don't recall.

Q. No. I'm asking you --
A. Did I get it?
Q. Yes.
A. No.
Q. Are you a union member?
A. No.
Q. Have you ever been a member of a union?
A. No.
Q. So what would happen is they would cut it out and bring it to you and say, "Take a look at this"?
A. Sometimes. The Industrial Hygiene had a bulletin that they received periodically, and the man that was here at that time used to send me copies of them every once in a while.
Q. Is it possible that that came to your attention prior to the '70's?
A. I doubt it, because I didn't go in there until April of '68, and I don't think it came in that quick after I got in there.
Q. With respect to the purchases of Unibestos that are reflected on Exhibits 3-A and 3-B, let me make sure: You have no personal knowledge yourself about the purchase or purchases that may be reflected on those documents. The only thing you

AC3441

know is what's on the documents themselves. Is that right?

A. What do you mean exactly?

Q. I mean, you don't remember the purchase or —

A. No.

Q. -- or remember seeing the material?

A. No, huh-uh.

Q. And the only way that you were able to even come up with Unibestos as a possible product is because you found it on that piece of paper?

A. That's right.

Q. Are you aware of any other companies that ever produced a product called Unibestos?

A. No.

Q. Would it come as news to you that some other company besides Pittsburgh Corning did that?

A. It would to me.

Q. I believe that's all I have. Thank you, Mr. Rapp.

A. Okay.

A05443

EXAMINATION

BY MR. CLYBURN:

Q. Mr. Rapp, my name is Lee Clyburn, and I have just a few questions for you today, since the other lawyers have already asked you some questions. All right, sir?

A. Sure.

Q. Are there any other records, other than the ones that you have brought with you today, that would reflect purchases of insulation products by Union Carbide since 1967?

A. Any other records? Sure.

Q. Okay.

A. I imagine. I don't know how long they keep their records, but they would have the records that will reflect the materials bought on our stores requirement.

Q. Storage requirement?

A. Stores requirement.

Q. Stores?

A. Stores requirement orders. It's a blanket order that we have a certain amount of material that we keep in our storeroom all the time, which I don't have any control over.

AU5444

Q. Who would have that information?

A. It would be in the Materials & Receiving Department.

Q. All right.

A. John L. Christiansen is the immediate supervisor there.

Q. Does that division or branch of the company buy more or less insulation material than your branch or division of the company?

A. Much less. It's just a token amount that's there for emergency is what it boils down to.

Q. Okay. Where are the records, if you know, that would reflect the purchases of insulation material by Union Carbide before the year 1967?

A. I doubt they exist.

Q. Have you brought with you all of the records for insulation purchases by your department since 1967 with you today?

A. Yes — no, not all. Up through '75.

Q. Okay. Let me just go back again to the years before 1967. You said that you doubt that those records exist. Is that right? AJ5441

A. That's what I said, uh-huh.

Q. Who would we ask within Union Carbide if we wanted to know about the disposition of these

records, or whether they exist or not?

A. I think Mr. Christiansen could either find out or be able to tell you himself.

Q. Okay. Do you know the names of any other people within Union Carbide who, regardless of whether they know about records or not, would know about insulation purchases in the years before 1967?

A. Say that again?

Q. Do you know the names of any people within Union Carbide who would be able to tell us about insulation purchases before 1967?

A. Yes; some of the people that are still with the company that worked in Purchasing in those years.

Q. Can you give us any names?

A. Well, there's a man in New York now named Ben Brittain, who was a buyer or purchasing agent for insulation when I first got this job.

Q. Okay. Is he still with the company?

A. He is still with the company, as far as I know.

Q. Anybody else?

A. I couldn't vouch for any of the rest of them, there's been so many of them. It seems like it was a proving ground for buyers.

Q. Do you know the names of any manufacturers of asbestos products that would have been used in Union Carbide before 1967?

A. I was thinking of something else when you were talking. I'm sorry.

Q. Do you know the names of any other manufacturers of asbestos-containing products that furnished some products to Union Carbide in the years before 1967?

A. No.

Q. Do you know or do you have any reason to believe, whether it's direct information or not, that Unibestos —

A. Let me back up on this last question. I do recall seeing the J-M and O-C cartons in the plant before 1967.

Q. Okay. Do you have any reason to believe that Unibestos products were used in this plant before 1967?

A. Yes, I do.

Q. Okay. Could you tell us the basis for that belief?

A. It existed. We run into it all the time.

Q. And you have already told us about its characteristics and colors and stuff?

AC5447

A. That's right. In the demolition of some units, it showed up there.

Q. Do you have any idea when that Unibestos was installed?

A. Some of it. One particular instance, I think, was probably around 1953 or '54, the polyethylene unit, which no longer exists.

Q. During what period of time did Johns-Manville have a contract to install insulation material?

A. I'd say it went from about 1969 through '79, 10 years, about.

Q. And during that time, would Johns-Manville employees actually come on to this plant site and do the installing of this insulation?

A. Yes.

Q. And that insulation material may or may not have been manufactured by Johns-Manville?

A. This is right.

Q. I have no more questions. Thank you, sir.

MR. WEDDINGTON: I have just a couple.

A05447

RE-EXAMINATION

BY MR. WEDDINGTON:

Q. Specifically dealing with this polyethylene unit, when was this that you were referring to just a while ago that it was torn down? When was it torn down?

A. Oh, memory isn't my long suit. I would say it's been two years that it's been torn down.

Q. Okay. And had the insulation on that unit been removed or changed any time in the last 20 years or so before it was torn down?

A. Well, some of this stuff, like I say, was the original insulation that was put on it.

Q. How could you tell that it was the original insulation?

A. How could I tell?

Q. Yes.

A. Well, I guess I couldn't stake my life on it, but --

Q. Well, I think just to be probably sure --

A. Well, we could go back to the application methods and the materials that they used in weather-proofing the stuff. It appeared to be the original.

Q. Okay. And was it all the units; the

entire unit?

A. No? Oh, no.

Q. How many of the units had Unibestos?

A. I couldn't tell you what percent, but there were many of the big steam headers in this unit that had it.

Q. Would it be —

A. Maybe 30 or 40 percent of the total insulation might have been that.

Q. Is there any way to tell who put that up, or --

A. I have no way to tell who built the unit.

Q. But you do know it was built in '53 or '54?

A. I would think so.

Q. Okay. Have you found Unibestos products or products that you believe to be Unibestos in any of the other units that were built before '67?

A. Oh, yes.

Q. Okay. Do you have any idea how many?

A. I couldn't say.

Q. Okay. You mentioned the color and the thorns, you called them, or you said the men called them.

A. Right.

Q. Do any of the other products made by other

manufacturers have these thorns?

A. Not in this -- not in the calcium silicate-type insulation, no.

Q. Okay.

A. You run into similar things in the mineral wool products, but --

Q. Well, is the difference between the Unibestos and the other types of asbestos insulations enough so that you could be reasonably sure --

A. Oh, yeah.

Q. -- that you are not confusing the two?

A. That's right.

Q. All right. But you know you haven't bought any of that --

A. Just what you have seen there.

Q. -- other than those two invoices since '67?

A. Yes.

Q. All right. And when you, a while ago, in response to Mr. Clyburn, said you remember seeing J-M and O-C cartons, were you referring to Owens-Corning --

A. Right.

A0545

Q. -- and Johns-Manville?

A. Yes.

Q. Can you identify products? I mean, when you are tearing down a unit, can you identify the Johns-Manville or Owens-Corning insulation by the --

A. Not always.

Q. Can you sometimes?

A. Sometimes.

Q. Okay. Have you torn down units that were built prior to '67 where you recognized some Owens-Corning or Kaylo on them?

A. Yes.

Q. Okay. Based upon your knowledge or the looks or the appearance of these different products, can you be reasonably certain as to whether or not Kaylo insulation was present on different columns prior to '67?

A. The only one you could be certain about was the Kaylo 20 because of its color. It was pink.

Q. Okay. But as to that particular one --

A. Other than that, the ones that were white or off-white are pretty hard to establish.

Q. But as to the pink, have you found some of that that you think was that because of your knowledge of the purchasing and all the other things that we've discussed that you know would have been present before '67?

A. Yes.

Q. All right.

MR. WEDDINGTON: I'll pass the witness.

MR. GILLESPIE: I pass the witness.

MR. KENDALL: I have maybe three questions.

RE-EXAMINATION

BY MR. KENDALL:

Q. As I understand it, in your work there are three operations: one, work in the shop; work out in the field, installing new insulation; and work tearing out old insulation. I'm talking about, I guess, when there was asbestos. Can you compare those, as far as the dust produced?

A. The biggest dust producer would be the demolition.

Q. Demolition? And that's always been there?

A. That's not true just now, but that's always been true.

Q. And when was it that Union Carbide first

started taking precautions to keep people from inhaling that dust? And particularly I have reference to other trades, like Mr. Vernon Scott.

A. I'd say the early '70's.

Q. Until that time, they would let him work right in that shower of dust and pieces and particles, whatever?

A. Along with the nuts and bolts.

Q. What?

A. Along with the nuts and bolts.

Q. Along with the nuts and bolts? And what was it in the early '70's that changed Union Carbide's mind about looking out after its tradesmen, its workers there?

A. I imagine -- this is speaking strictly for myself, but I imagine OSHA getting into the act.

Q. Have they ever done any more than OSHA required, as far as --

A. Yeah. Yes, sir; definitely. They usually go beyond OSHA.

Q. When did they start going beyond OSHA?

A. I think some of the methods we use go beyond OSHA.

Q. When did they start doing that?

A. Well, in recent years; not back then.

Q. In the late 1970's?

A. Right.

MR. KENDALL: I have no other questions.

RE-EXAMINATION

BY MR. MIZELL:

Q. Have you ever seen any Unibestos in block form, as opposed to pipe covering?

A. I don't recall ever having seen any.

Q. All right. I want to ask specifically about the five-year period that would have preceded the date of these records, 1962 to 1967. Start with that. Can you tell us of your own personal knowledge of any Unibestos products, pipe covering or anything else, that was installed in the plant in that period?

A. No, I can't tell you personally.

Q. Okay. That's all I have. Thank you, sir.

AC 0545

RE-EXAMINATION

BY MR. CLYBURN:

Q. Let me ask you as to Kaylo the same question: Can you personally tell us of any Kaylo that was installed in the years 1962 to '67?

A. I couldn't put my finger on where it was, but I know it was. I've seen it done.

Q. You just feel like it was?

A. I know it was done, because I did some of these studies on insulation during those years.

Q. Okay. That's all I have. Thank you.

(Discussion off the record.)

JAMES HENRY RAPP

STATE OF TEXAS)

SUBSCRIBED AND SWORN TO BEFORE ME, the undersigned Notary Public, on this the_____ day of _____, 1982.

NOTARY PUBLIC

THE STATE OF TEXAS)

I, Linda C. Baker, Certified Shorthand Reporter in and for the State of Texas, hereby certify that at the time and place stated, the witness, JAMES HENRY RAPP, personally appeared before me and, after being by me first duly sworn to tell the truth, the whole truth, and nothing but the truth, was examined by Counsel for the respective parties hereto; that the testimony of said witness was taken in shorthand by me, later reduced to typewriting under my direction, and the foregoing 95 pages is a true and correct transcript of said testimony.

I further certify that the charges for the preparation for the original hereof are_____, to be paid by Attorney for the Plaintiffs.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this the 25th day of June, 1982.

_____
Linda C. Baker
Certified Shorthand Reporter
In and for the State of Texas

My Certification Expires:
June 15, 1984.